innovative public housing

Delugan_Meissl

`The Beam´ Residential Block

Vienna, Austria

Photographs: Margherita Spiluttini

With the Donau City urban development project, Vienna follows a two-fold objective: to push the city outwards toward the Danube, which until now has been more part of folklore than of the city itself. At the same time, the aim is to give the historical center a modern counterpart with conditions that favor growth. In the nineties, a damper was put on these planning ambitions when Vienna decided by referendum to pull out of the EXPO 95 and the master plans for the presumed World Exposition grounds were tossed out. Ten years later the area has become a built exhibition of the most diverse living concepts, erected along the contours of earlier urban planning concepts, but without strict cohesion. Along its entire 180-meter length, the prostrate apartment building follows the shoreline of the New Danube and seems almost like a tanker that has been anchored on the bank. The structure is supported by pilotis that raise the building like a stage above the plateau-like slab base. The final section is a tower-like structure, the so-called "Beam," that looks out towards the old center of town.

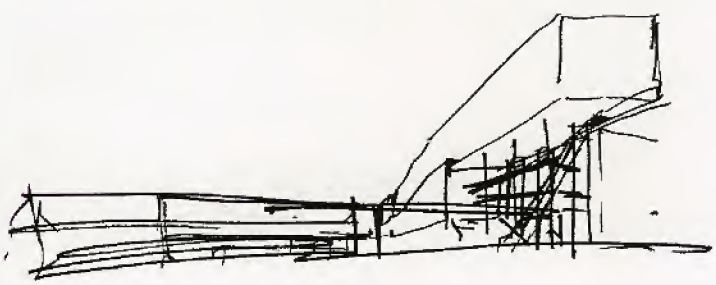
Its dimensions and the prominent position in front of the other rows of apartment buildings place the Beam in the limelight, while offering its inhabitants, in their riverside apartments, truly spectacular views, stretching from the bars directly below its loggias to the silhouette of the first district in the distance.

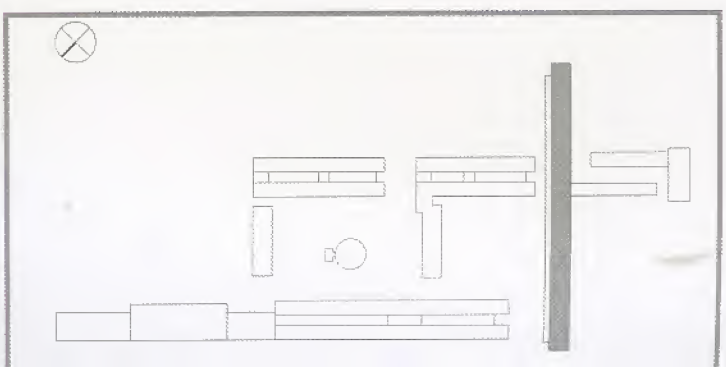
From the outer edge to the center of the building the pilotis vary in height between ten, seven and four meters, creating spaces of varying size beneath the structure. Along this open space a perron unfolds, undulating as if set in motion by an opposite current. Like an elongated sculpture it connects the private upper part of the building with the netherworld of the underground garages and subway stations.

The traditional slab form is revolutionized via ingenious sectional strategies that run from the center to the edge as well as from bottom to top: the 250 apartments extend from front to back, some of them are maisonnettes, and have both a glazed loggia and a kind of glassed-in vestibule as part of the network of walkways/access ways for entering the apartments along the glazed back of the building.

In keeping with the given urban planning situation but also with contemporary living habits this design is not a "machine", but rather an open container for urban living that offers plenty of room for very diverse life styles.

From the outer edge to the center of the building the pilotis vary in height between ten, seven and four meters. The shape and disposition of the building - in effect, a "horizontal skyscraper" - has been conceived as a massive cantilevered beam.





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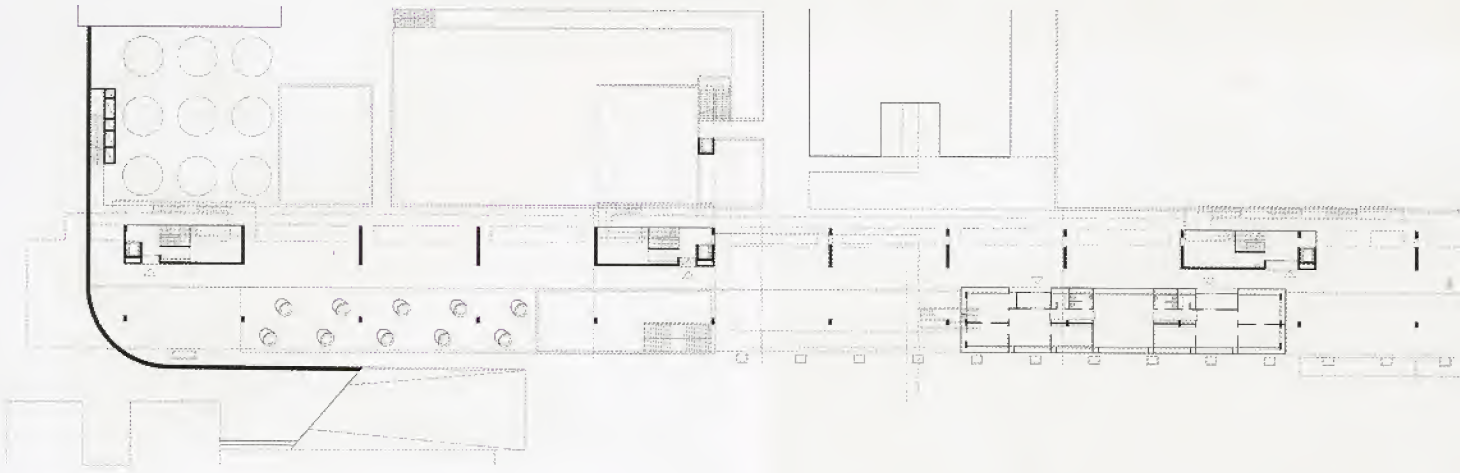
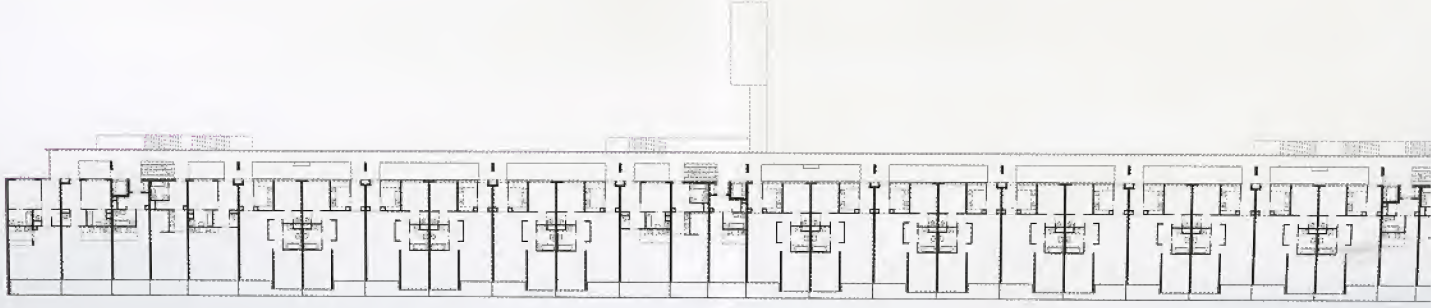
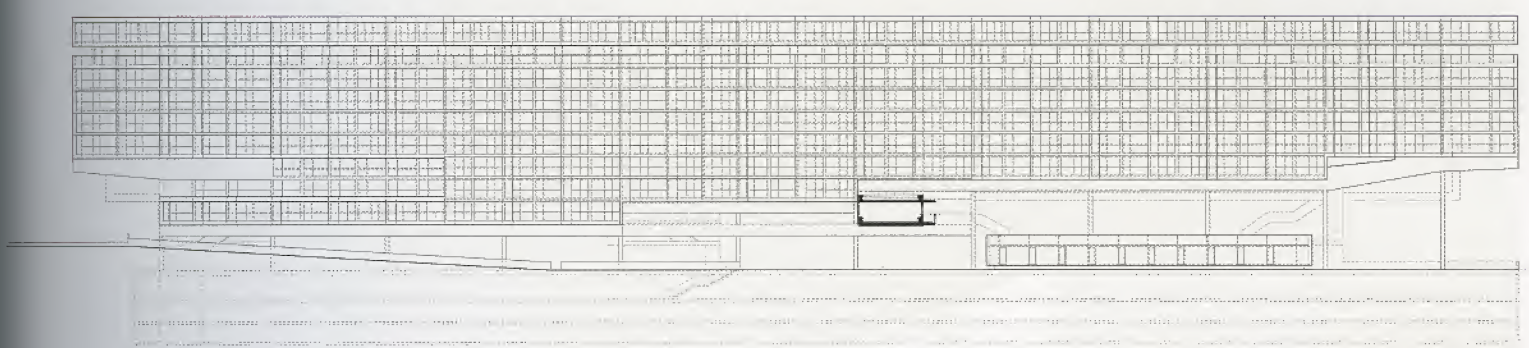


Ground floor

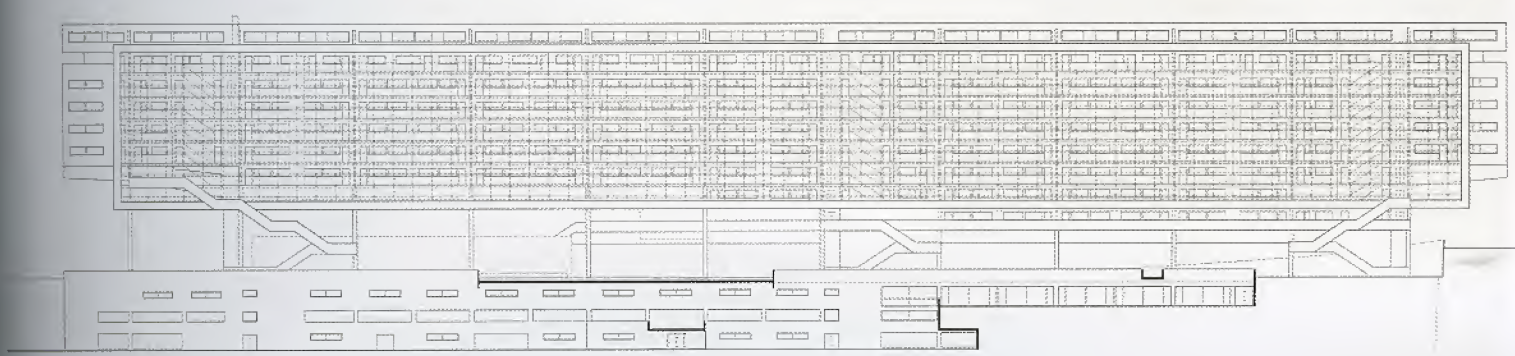


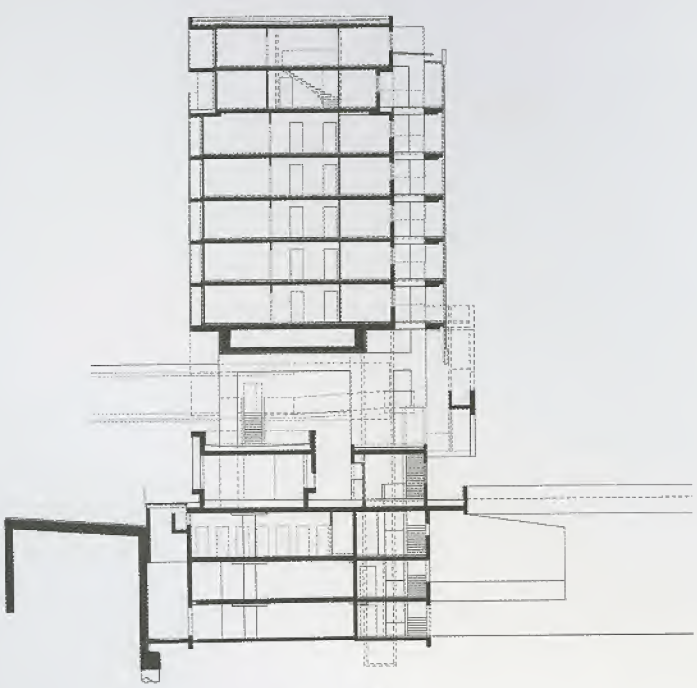
Tract floor plan. The building hosts 250 dwellings, some of which are duplex

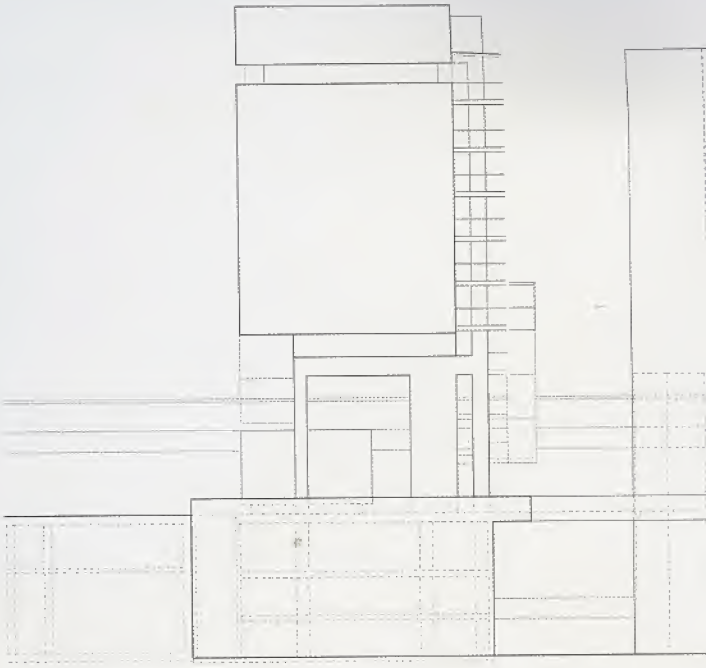
0 25 50 m



Southwest elevation, glazed façade.



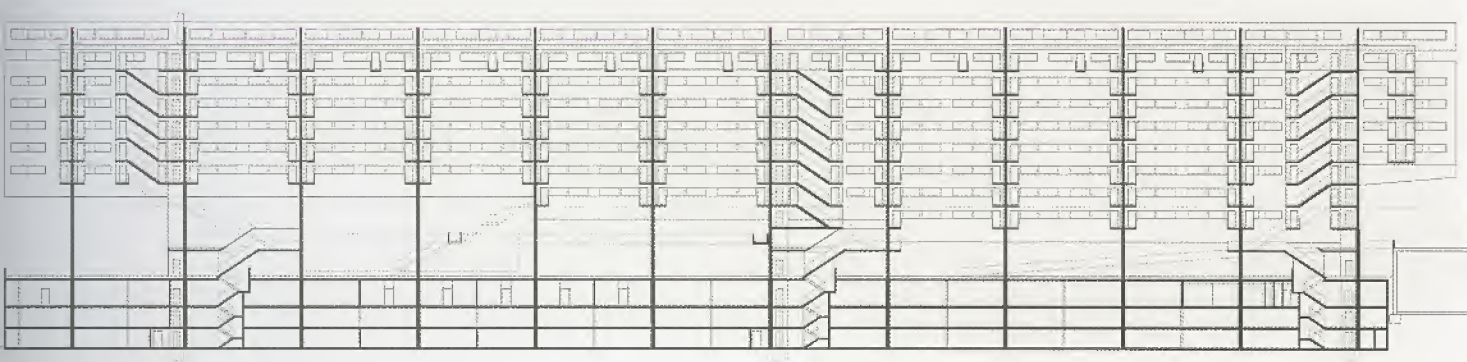




Cross section and elevation.

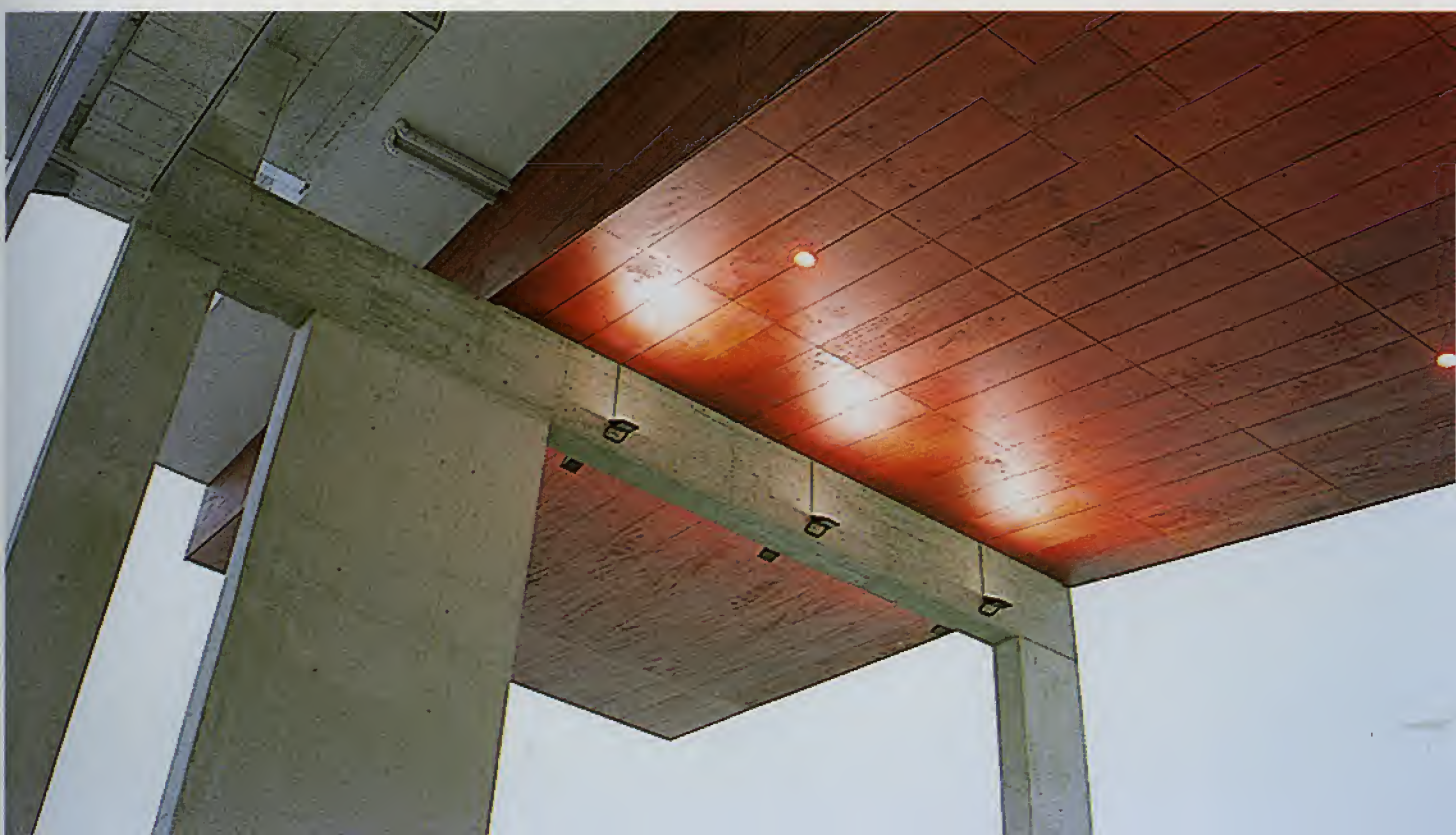
A series of skylights direct natural light to the underground floors.

The base on which the block sits is punctured with large open spaces that serve as a viewing slit for the buildings behind it.



Longitudinal cross-section.

The final cantilevered section of the building provides balconies with ample views of the old town center.



Francis Soler

Social Housing on Rue Paul-Signac

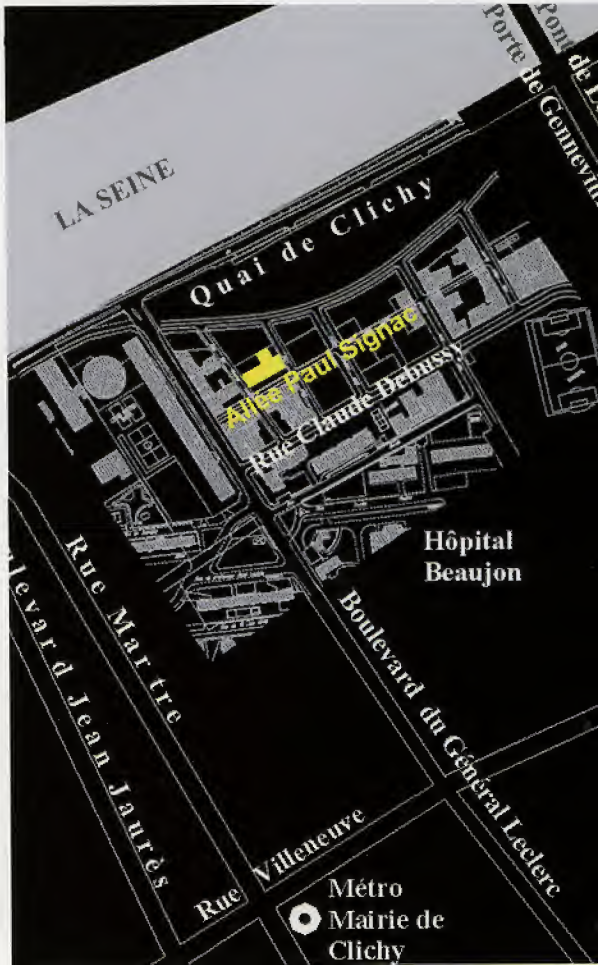
Paris, France

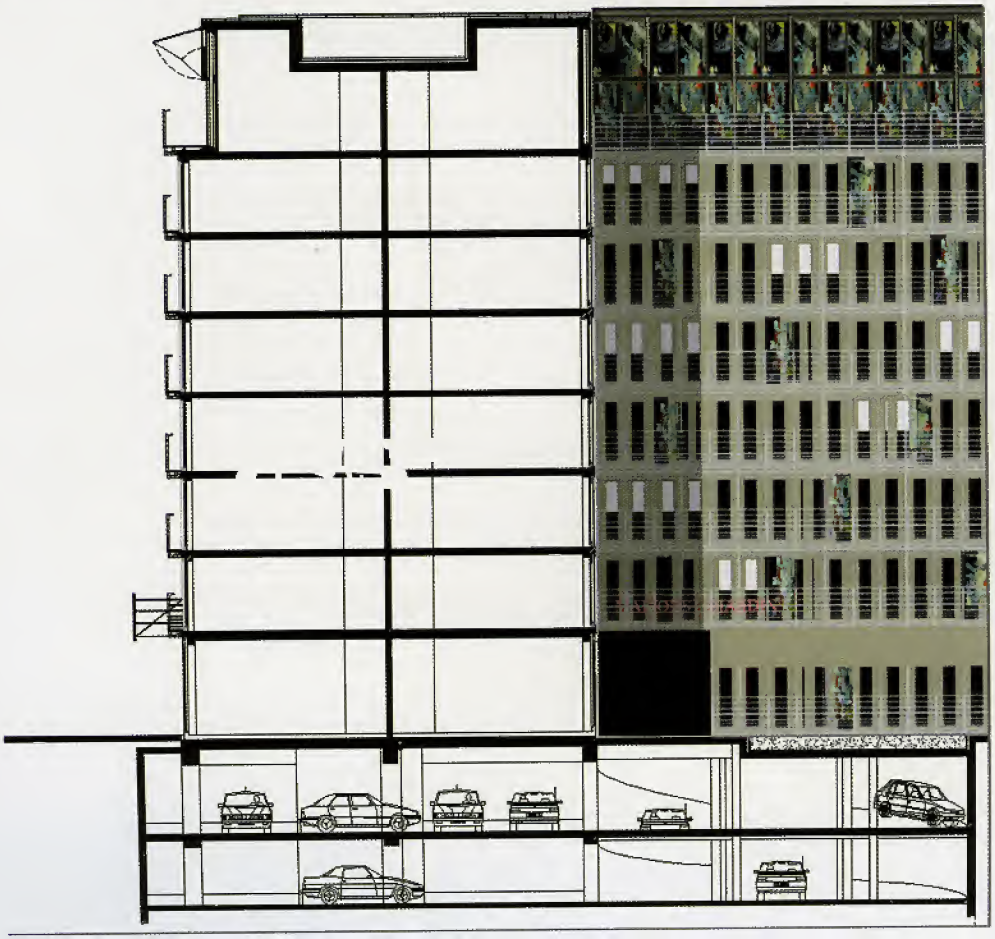
Photographs: O. Wogensky

When designing this housing block, Francis Soler reduced construction and services costs by taking maximum advantage of existing building techniques. The architect aspired to create a non-restrictive building solution that would allow for internal movement or displacements in the façade once the main decisions had been made.

A series of concrete slabs where built floor by floor, without links to walls that would have complicated building schedules. The architect decided to build 48 x 14 meter slabs supported at the center by an uninterrupted continuous structure. A number of pillars where situated along the perimeter. The enriched concrete of these square pillars reduced their area considerably. The façades optimize the aluminum profiles so that a single solution is valid for the whole building without unnecessary elements.

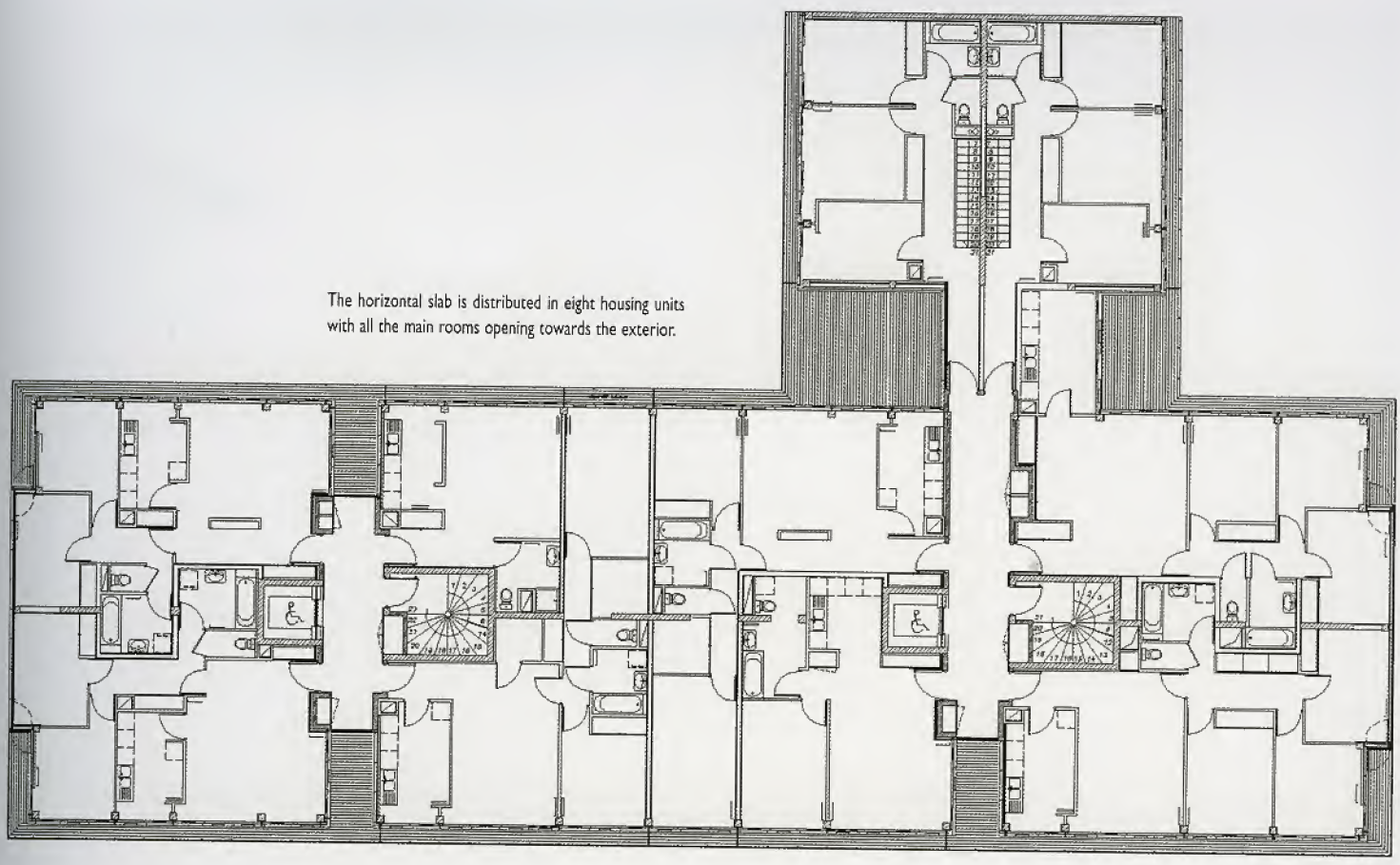
Francis Soler worked with repetition. The concept consists of manufacturing an element and multiplying it to the point of satiety. Multiplication and repetition are concepts inherited from pop art. The work of Christian Boltanski, Andy Warhol or Roman Cieslewicz has made them possible. Unlike painting, sculpture or literature, architecture is a pragmatic art that can not feed only on imagination. Far from suiting only random systems, it adapts well to a certain rigor. And it is this same rigor that sometimes leads to the outburst of an unheard-of dimension: rhythm. This rhythm is accomplished in the façade through vertical aluminum profile enclosures and horizontal continuous balconies. The façade also includes designs printed on glass, providing the block with an element of color, which can be particularly appreciated from the interior of the dwellings.

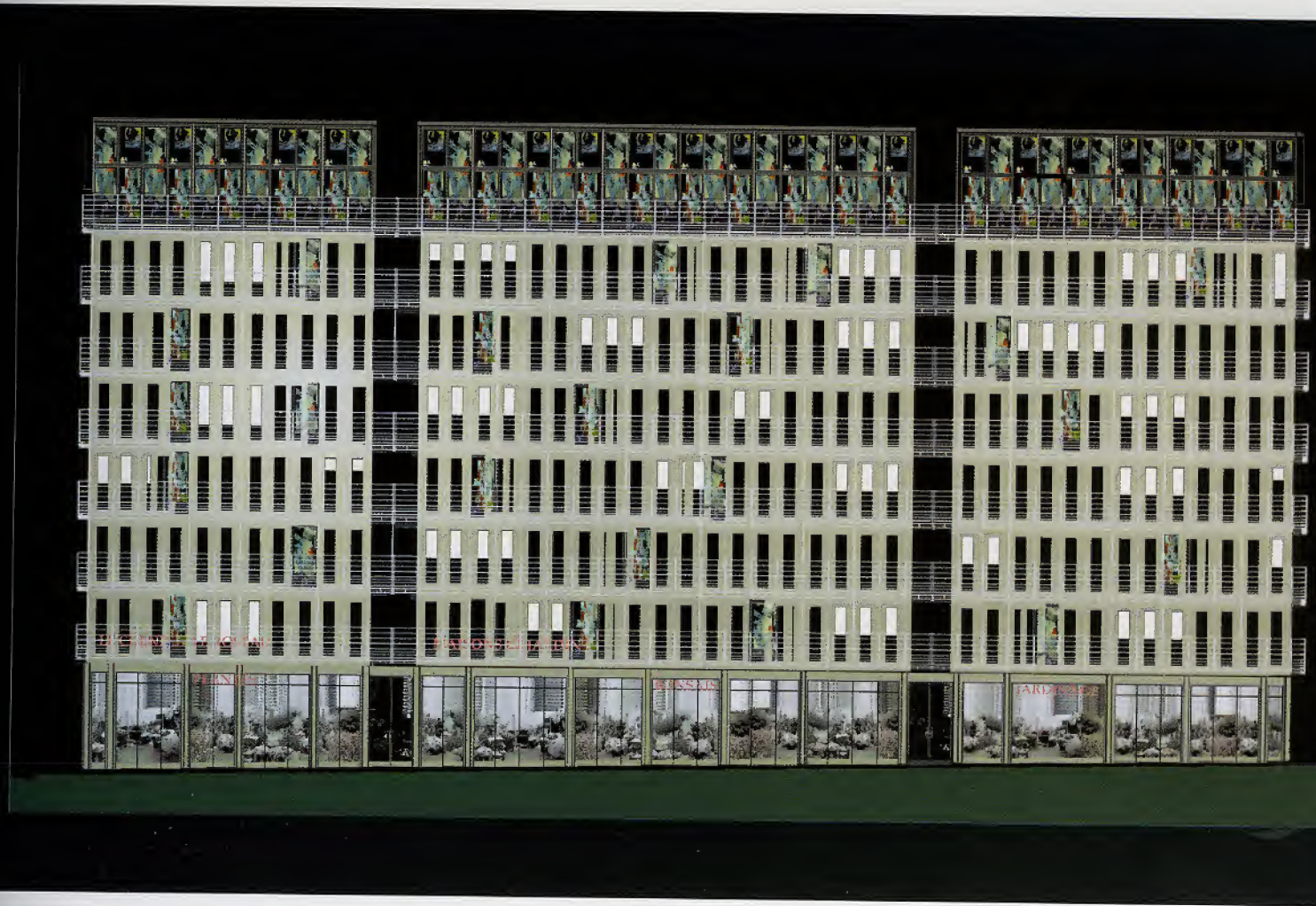




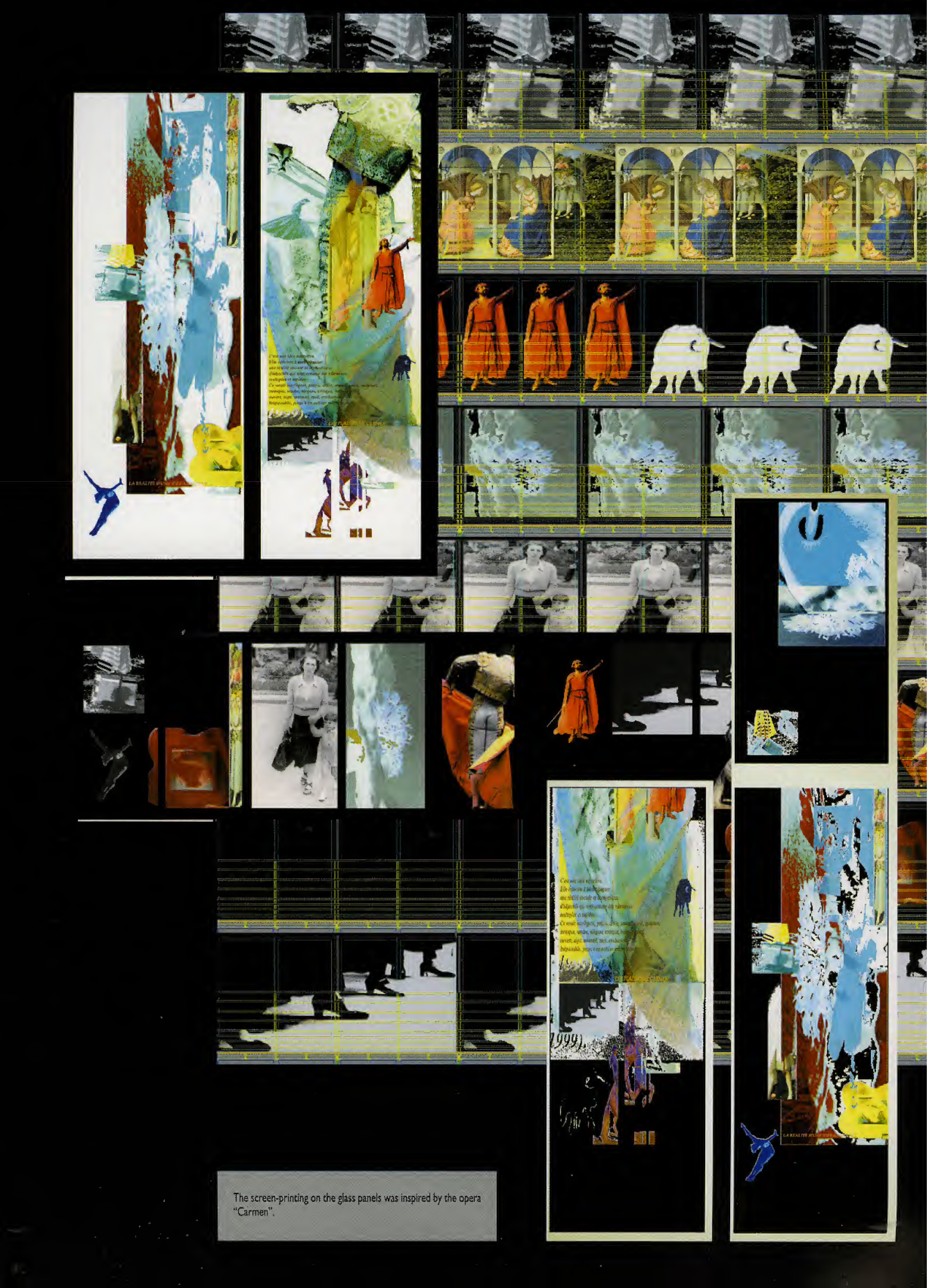
Both the interior and exterior elevations are composed of an in
al repetition of golden lacquered aluminum modules.

The horizontal slab is distributed in eight housing units with all the main rooms opening towards the exterior.

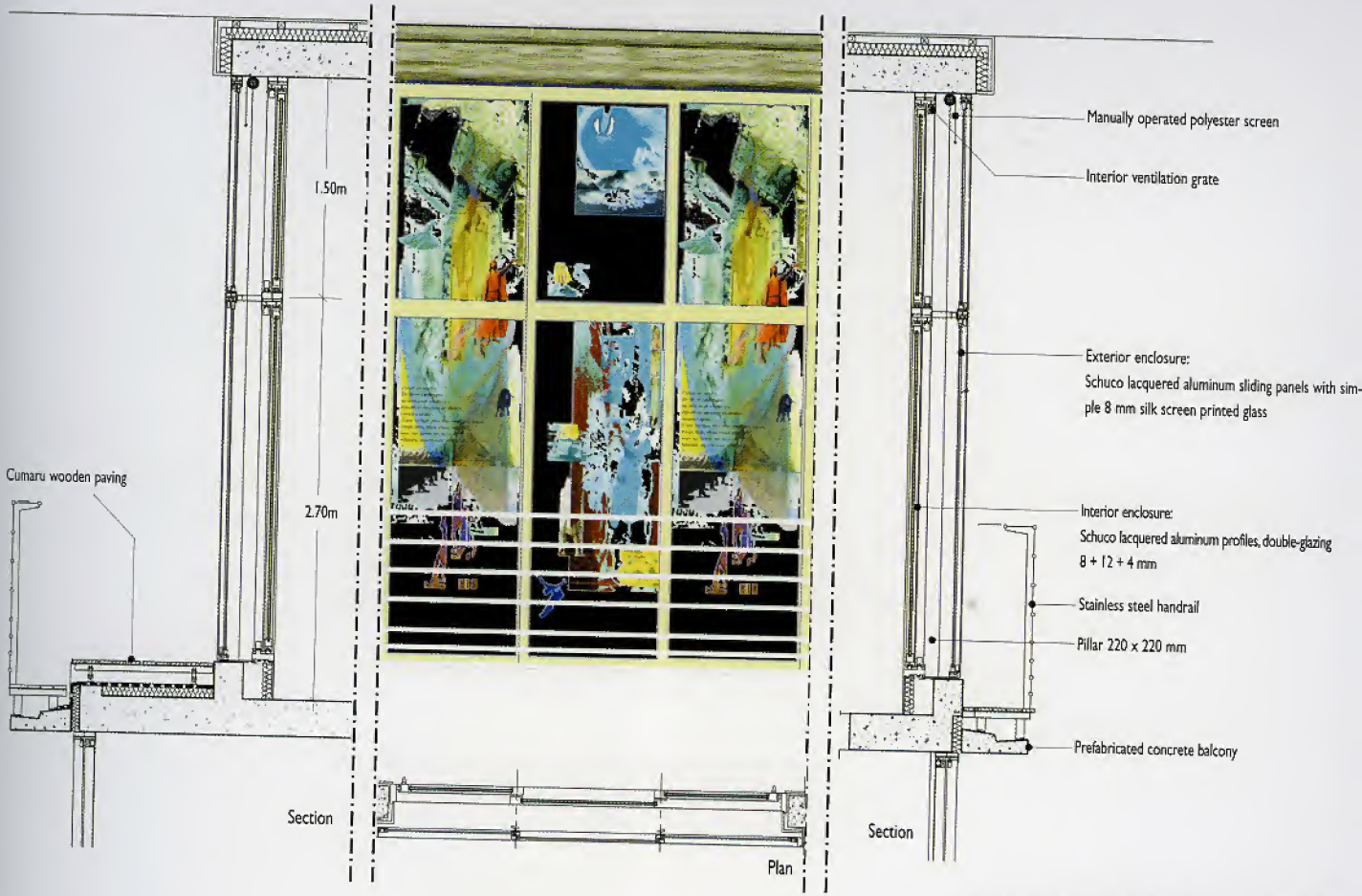




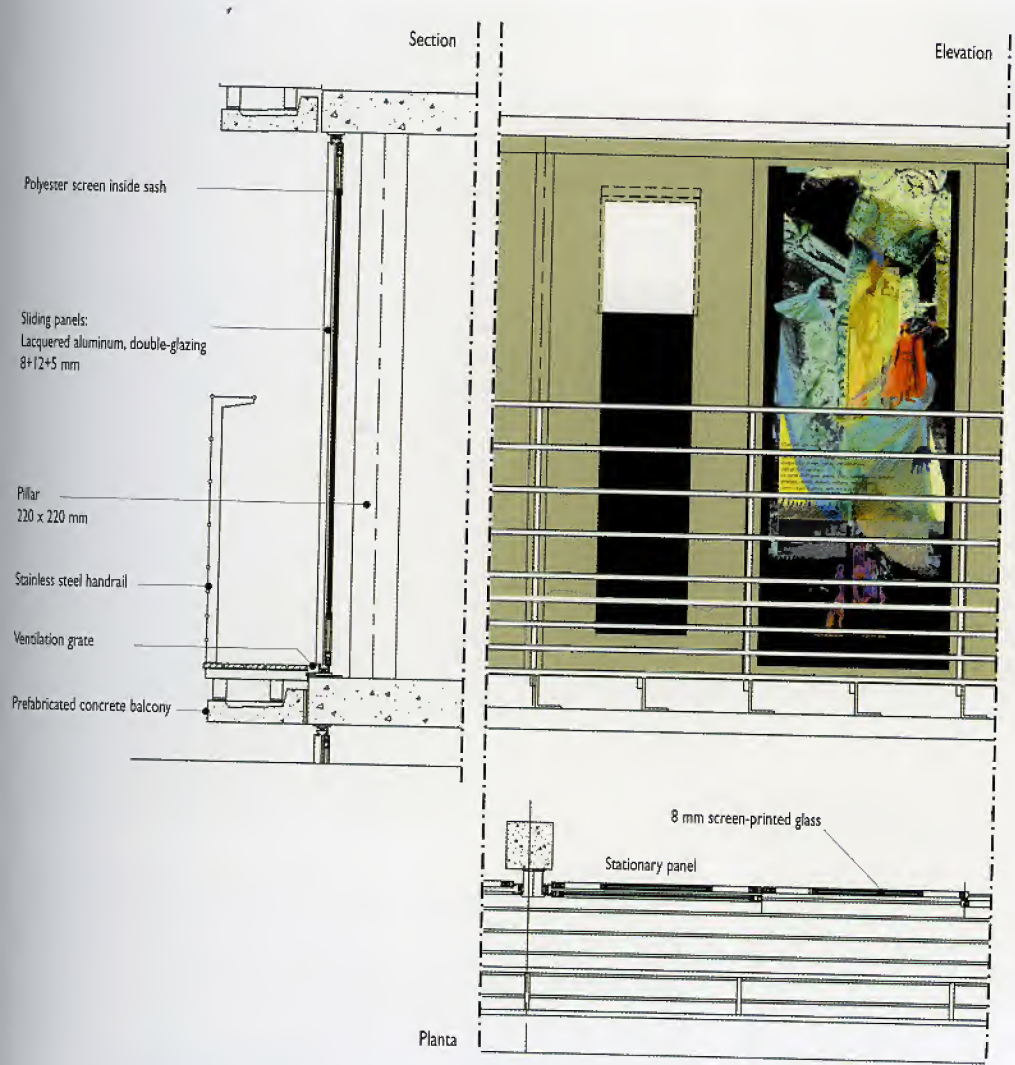
The apartments of the first six floors have a sliding printed glass panel can remain hidden behind the aluminum panels. On the last floor, the v exterior enclosure is composed of printed double glazing that control heat flux between interior and exterior, so that the temperature in apartment can be freely adjusted. The colored panels tinge the apartm interior space as well as differentiate one from the other.

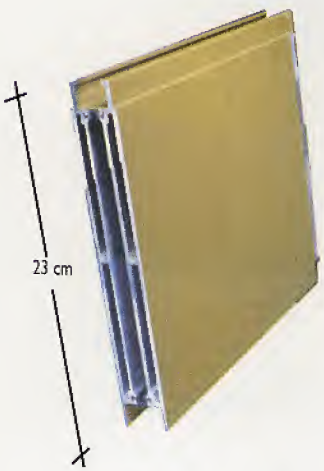


The screen-printing on the glass panels was inspired by the opera "Carmen".



Seventh floor enclosure: the regulations governing insulation would not permit the façades to be completely glazed unless the panels were folded, as is the case here.





First to sixth floor enclosures: the maximum measurements for the profiles were pushed to their extreme in order to resolve the façade with a unique finish and avoid complex assembly.

KCAP

Het Baken

Deventer, Netherlands

Photographs: Robert Hart, Jan Bitter

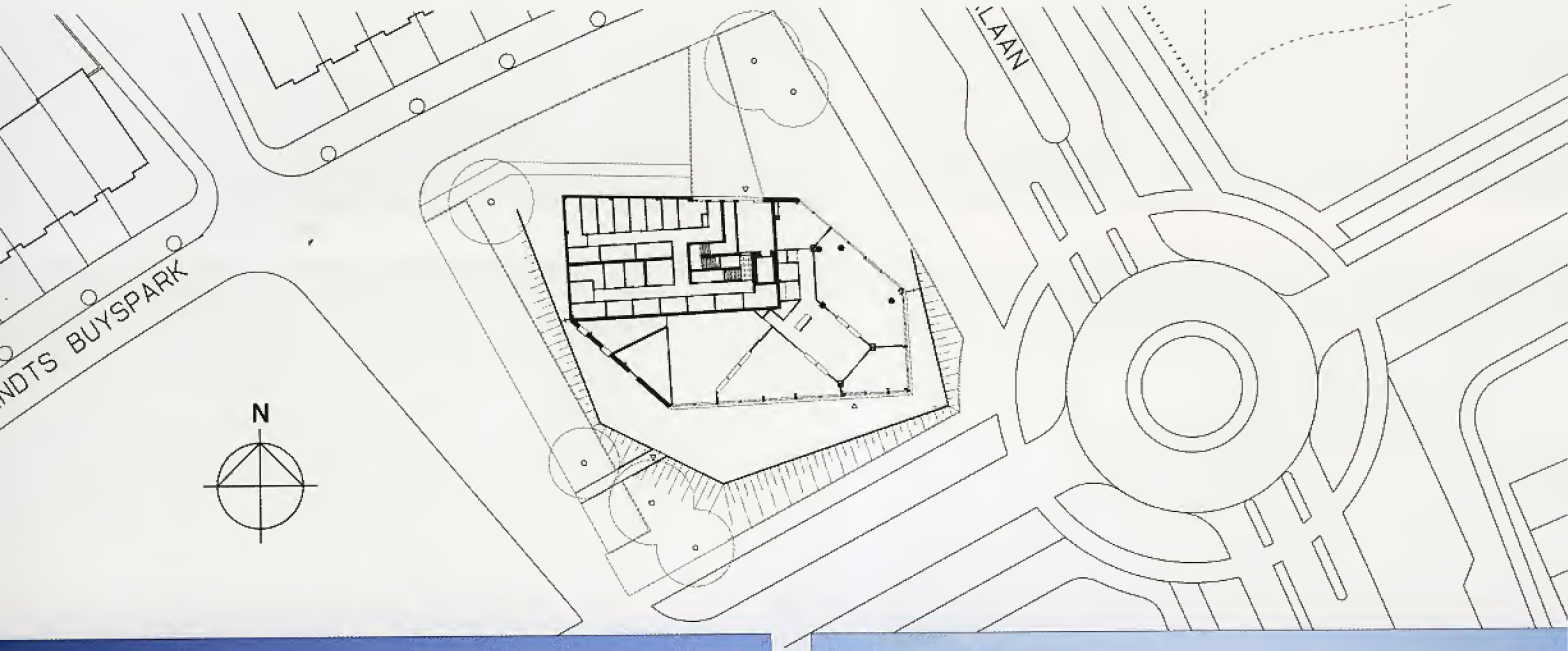
A mixed-use apartment building was created in the new suburb on the outskirts of Deventer. In keeping with the program requirements, there is a ground floor shopping center encompassing 500 m^2 and a seven story residential complex, which includes 22 apartments and a daycare center.

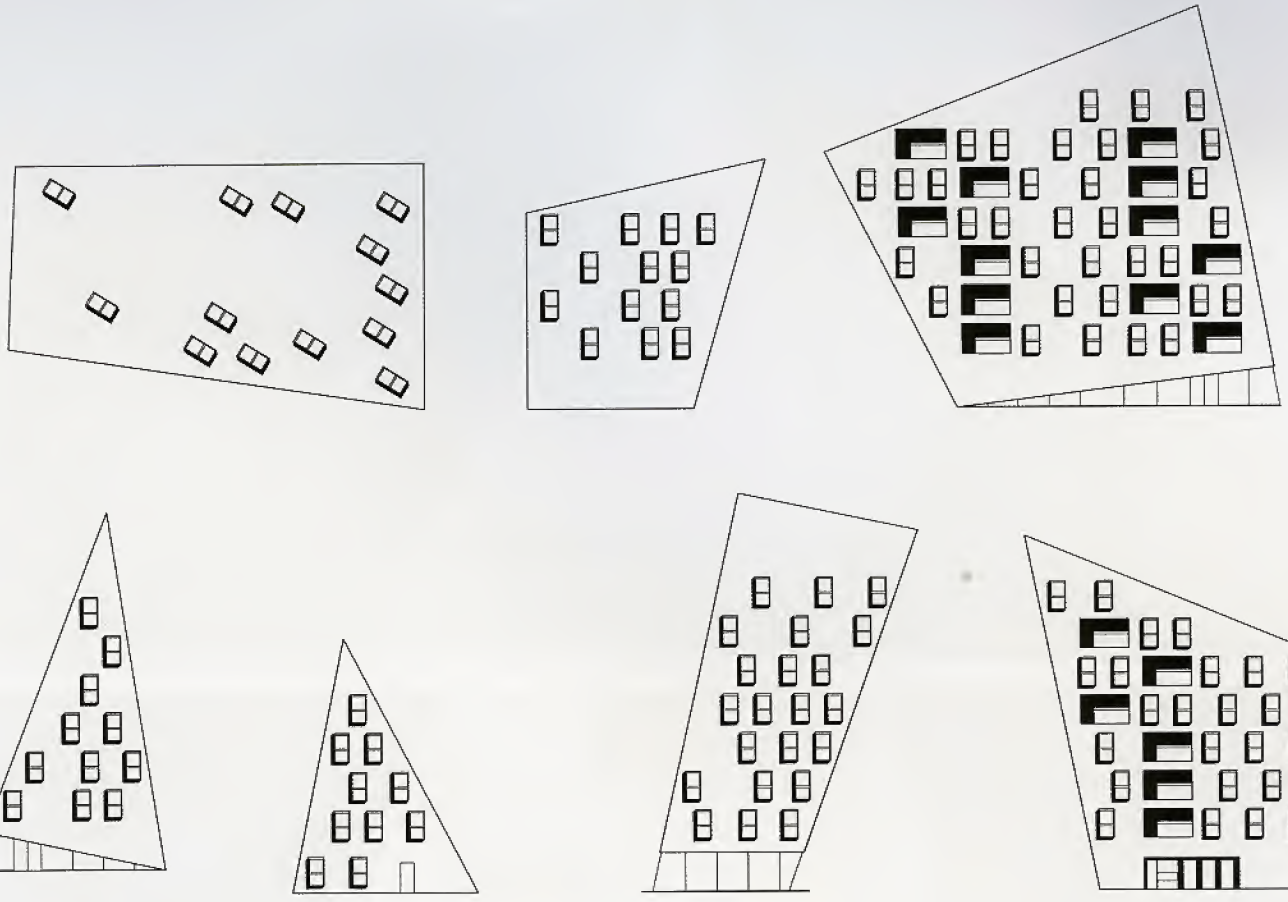
Both the urban and zoning plans made reference to the idea of the lighthouse as the desired image for the future building. The volumetric translation of the program contrasted, however, with this image. The end result is a massive "rock" filled with homes, forming a striking building in this newly developed zone.

Consisting of eight irregularly-shaped layers, the building provides unexpected and intriguing perspectives when viewed from the surrounding low-rise buildings. Owing to the unusual shape of the building, there are a large number of different apartment layouts. A natural stone façade forms a continuous skin that entirely envelops the building.

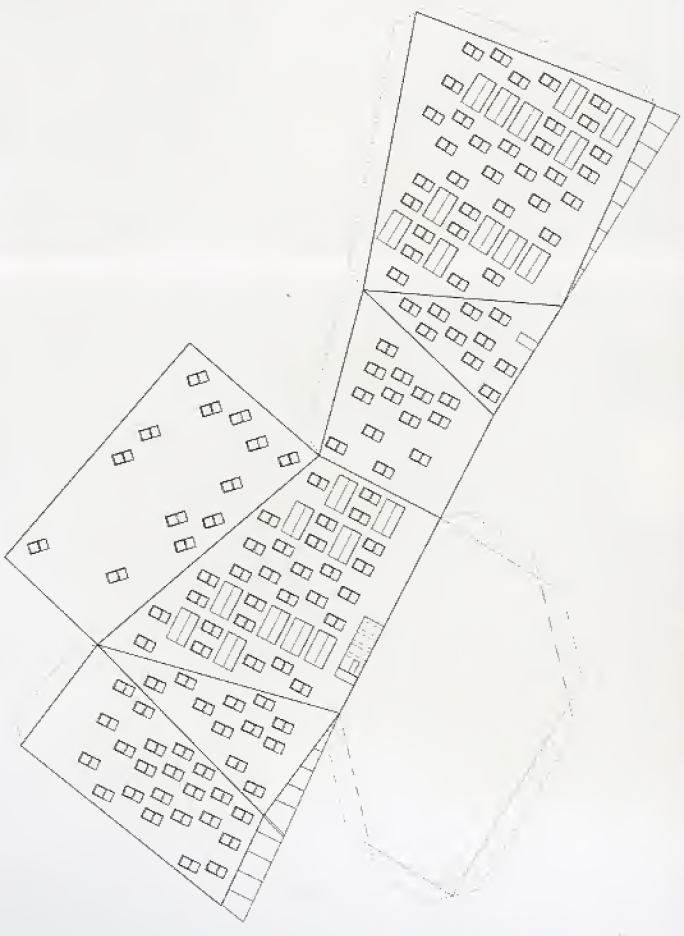
So, in spite of the building's "failure" to make reference to a lighthouse, its dynamic form successfully serves as a beacon in a sea of low-rise dwellings.

The building sits like a massive inhabited rock in the midst of low-rise structures and standardized plot urban surroundings.



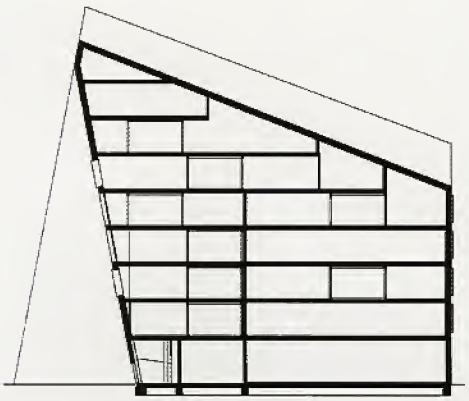


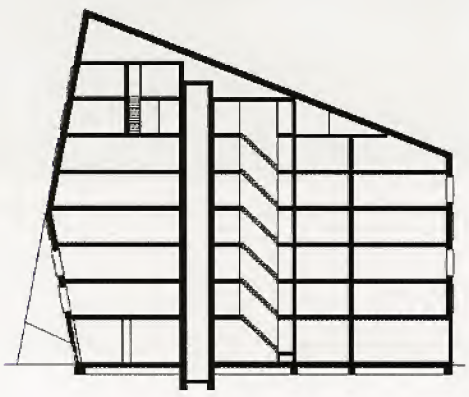
The geometry of the elevations is like a huge set of cut-out play pieces; each side is unique, contributing to the
nd result in a singular way.

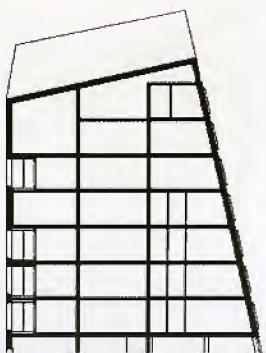


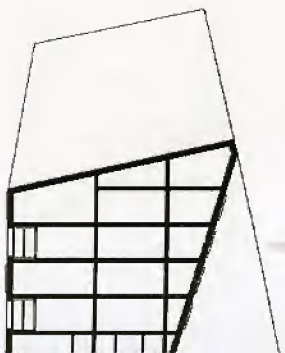
The cross-sections might suggest a whole group of different projects.

The silver shine of the stone cladding defines the expression of the volume, setting its edges into precise relief and giving the skin a continuous feel.



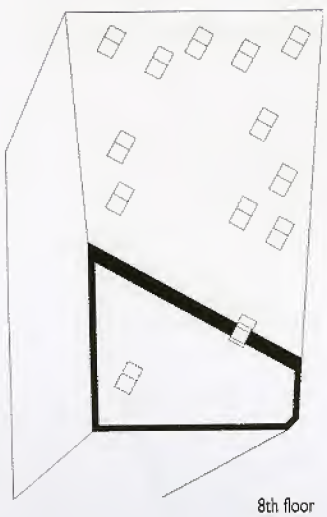




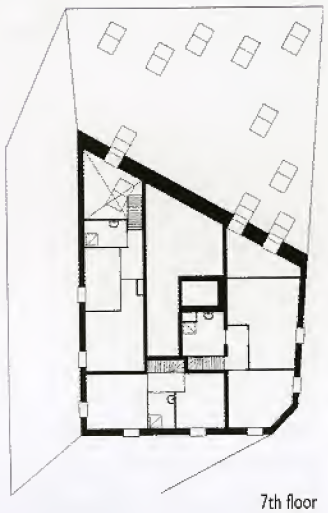


Half of the groundfloor's perimeter is a glazed wall, forming a fragile-looking band as compared to the solid volume of the building.

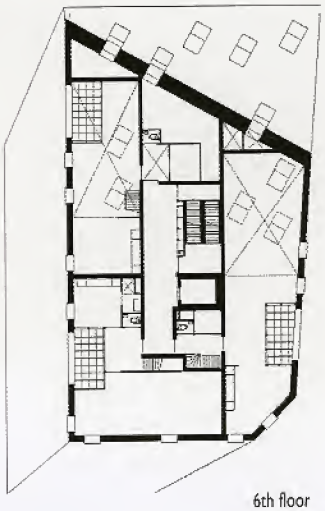
© Jan Bitter



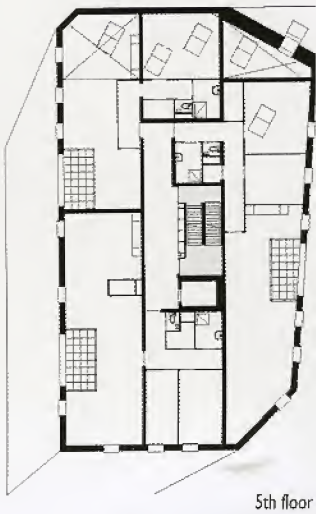
8th floor



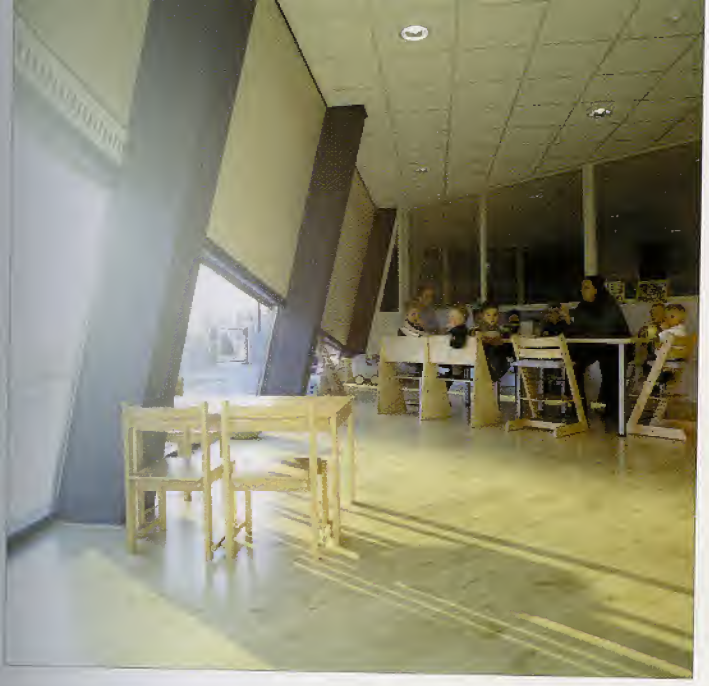
7th floor



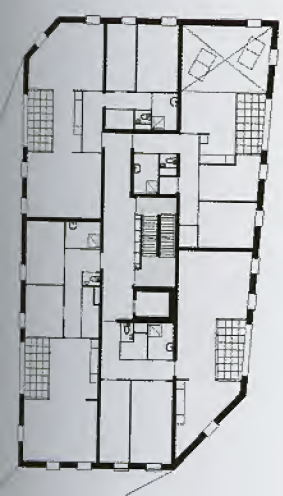
6th floor

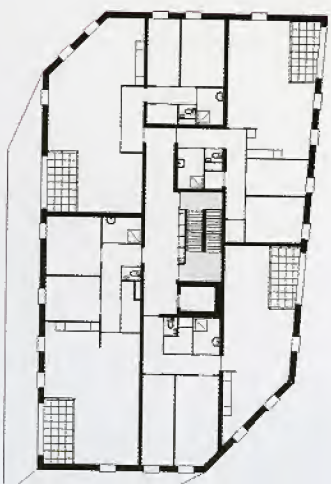


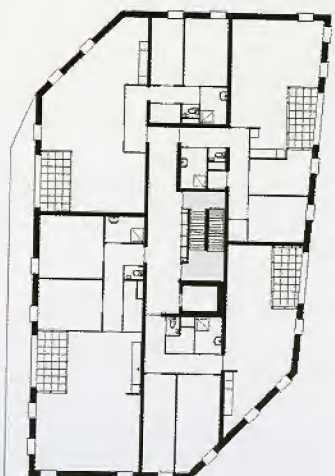
5th floor

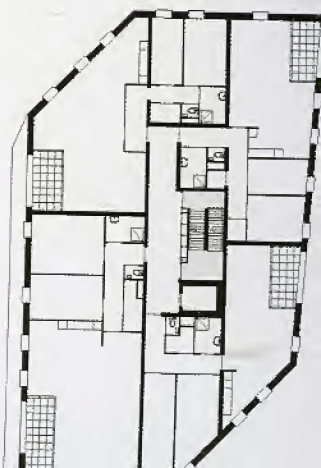


No apartment is like any other, and all interior spaces refer to the exterior geometry.









Francisco Mangado

Housing in Mendillorri

Pamplona, Spain

Photographs: Roland Halbe / ARTUR

The building is situated in Mendillorri, an area of new development, which consists mainly of low-density social housing and great amounts of green areas located just outside of Pamplona. Five years after its construction, 5000 dwellings have been built and they are inhabited mainly by young couples. It is now ranked as one of the city's most pleasant areas to live in.

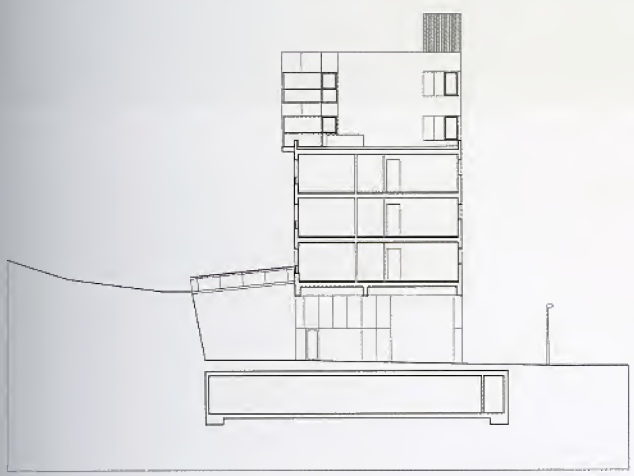
The architect had to deal with a very low budget for subsidized housing sold at an extremely low price. The urban plan had already arranged for a building of emphatic lineal geometry to establish the limits of a huge park with great structural importance. At the same time, the building had to host a great typological variety demanded by the regional government's social housing policies. A building then defined by urban parameters as a very long, forceful volume with assorted sections that suit the different urban, topographic, and typological situations.

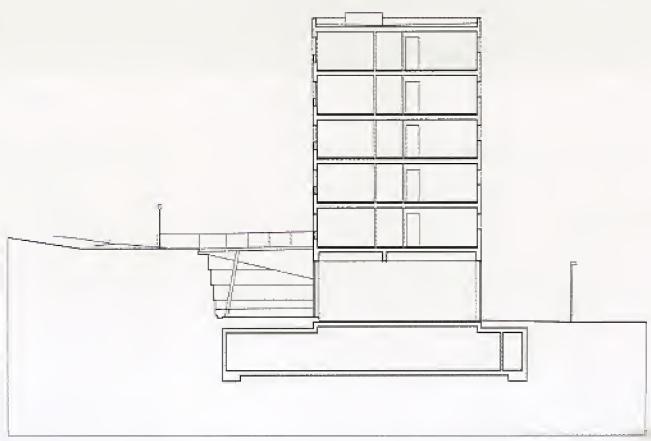
Its double orientation allows the building to enjoy both the park and the large square on Mendillorri's access road. The ground floors have a special importance in this sense. When open, they create a great porch that establishes a physical and visual continuity between the building's public space, the street, square and park. The building's back street, generated by an abrupt topographical break held by gabions filled with rocks, is arranged following the square and street's paved surface to allow a simple access to the park's planted slopes and the building's entrances. The building is accessed from the park through gangways that bridge the existing topographic difference, and typify the built "landscape" on this side, or directly from the street at its lower level.

The chosen typology is a basic housing scheme developed from an extremely functional and programmatic logic where each type allows multiple variations. This simple typology contributes to achieve extremely reduced budget objectives. A repetitive compositional scheme underlines the longitudinal dimension of the complex where a single horizontal opening singles out each dwelling.

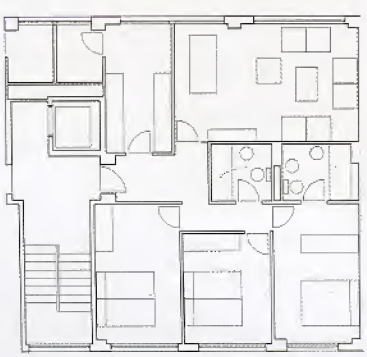
The topographic break at the back of the building is shaped by gabions filled with rugged rocks. Its structure is a continuation of the paved surface of the square and street. The painted rendering coat and sheet metal complete the list of materials used.

The bridges allow a simple access to the park and to the front door of each apartment.

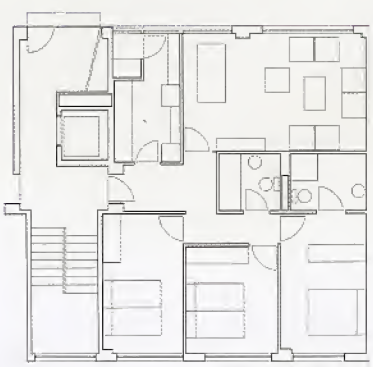




The sections show the two different access levels: from the park via the bridges or from the street at the lower level.



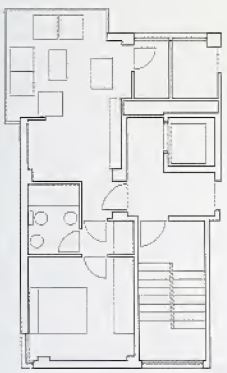
Type 1 floor plan



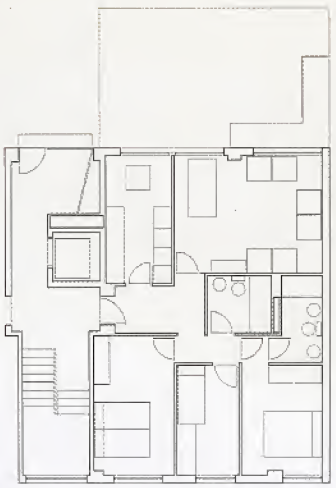
Type 2 floor plan

A single housing type with a double orientation is repeated throughou
building except for those at the corners and on the ground floor. The
rooms face the street, while the kitchen and living room enjoy views o
park and recreation area. The bathrooms and services are situated in
central section.

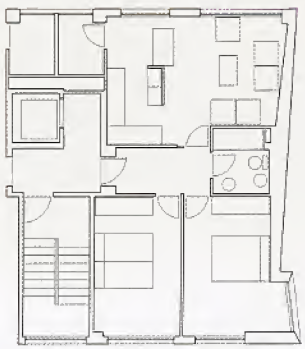
The construction process of the façade was simplified via the repetition of only two types of openings.



Type 3 floor plan



Type 4 floor plan



Type 5 floor plan

0 1 2 5m

Marcus Rommel Architekten BDA

Ochsenanger Bamberg

Bamberg, Germany

Photographs: Gerhard Hagen / ARTUR

This housing complex was the winning project in a design competition open to the whole European Union. The competition brief placed emphasis on the concern that the people had for the environment in which they lived, the community, neighborhood and energy efficiency. Thus, much more than a merely functional house was required.

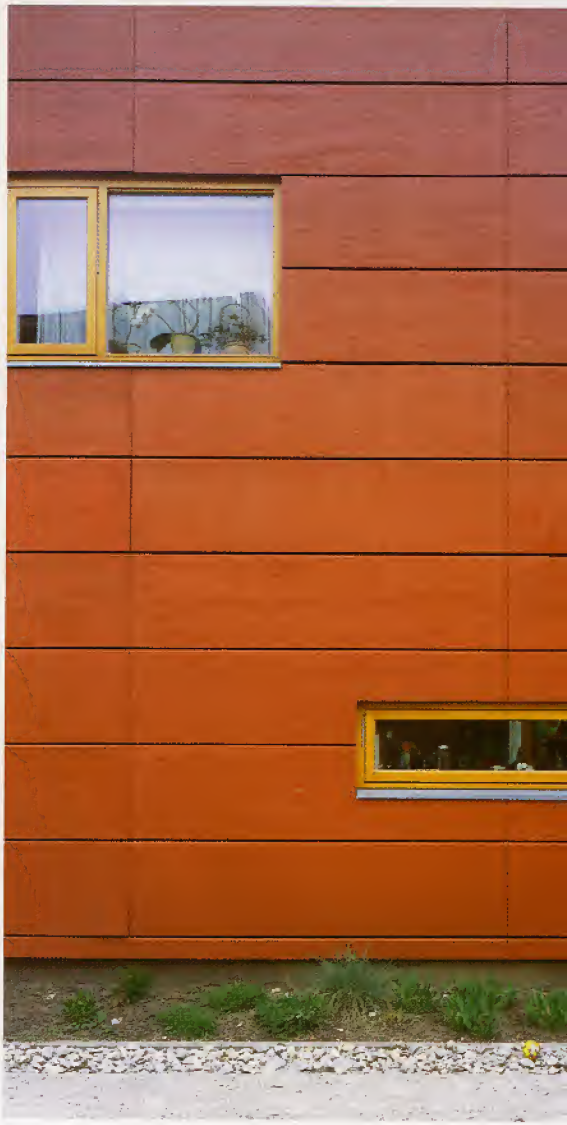
Within an experimental housing program, 28 units with communal facilities were implemented in the northeast part of Bamberg's city center. The program is called "An Affordable House of One's Own" and aims to create compact buildings with low construction costs. The idea of this housing development without parking space (cars can be parked outside the residential area) rests on various points concerned with planning and the urban environment. The complex has a good public transport service and bicycle infrastructure, and there is a school and kindergarten in the neighborhood as well as a large landscaped area on the opposite side of the Regnitz river, which can be used as a recreation area.

The project aimed to find a balance between the social, economic and ecological factors. Privacy was also important for this community, which is reflected in the small squares and walkways integrated into the complex.

The buildings are oriented on an east-west axis, with the upper levels oriented north-south. There are three kinds of dwellings with three, four and five rooms as well as a kitchen and bathroom, with two bathrooms for the five-room units. All the buildings of a particular type have the same layout. The living room on the lower floor faces the garden on one side and the courtyard on the other. The floor plan is based on the idea of flexible space.

Given that the design does not include basements and storage space, places for stowing bicycles have been built outside.

Regarding materials, wood was chosen because of its ecological, economical and energy-efficient characteristics. The facades were built from prefabricated timber panels, substantially reducing the construction time, while the construction method used is highly effective in fulfilling energy requirements.



This complex, formed by twenty-eight dwellings and common facili
located on the shore of the Regnitz River.

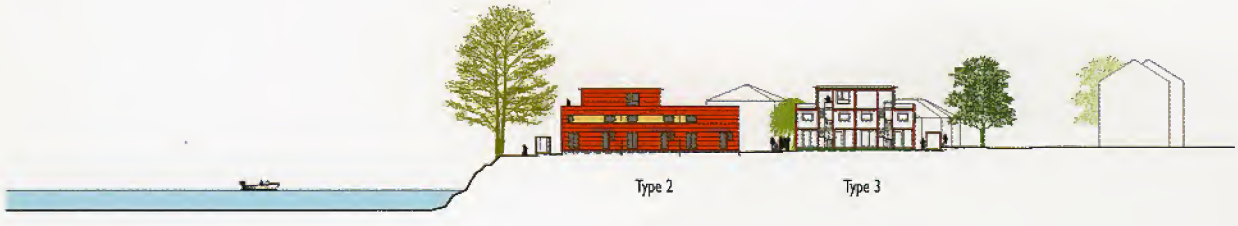
The search for privacy is reflected in the private patios and terraces as well as in the interstitial exterior spaces that create small squares and open-air leisure areas.

3 Rooms

4 Rooms

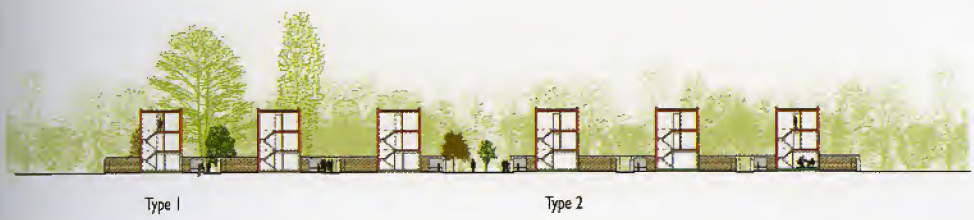
5 Rooms

There are three different types of buildings, with three, four and five bedrooms. The three different types are grouped without distorting the overall unified look.



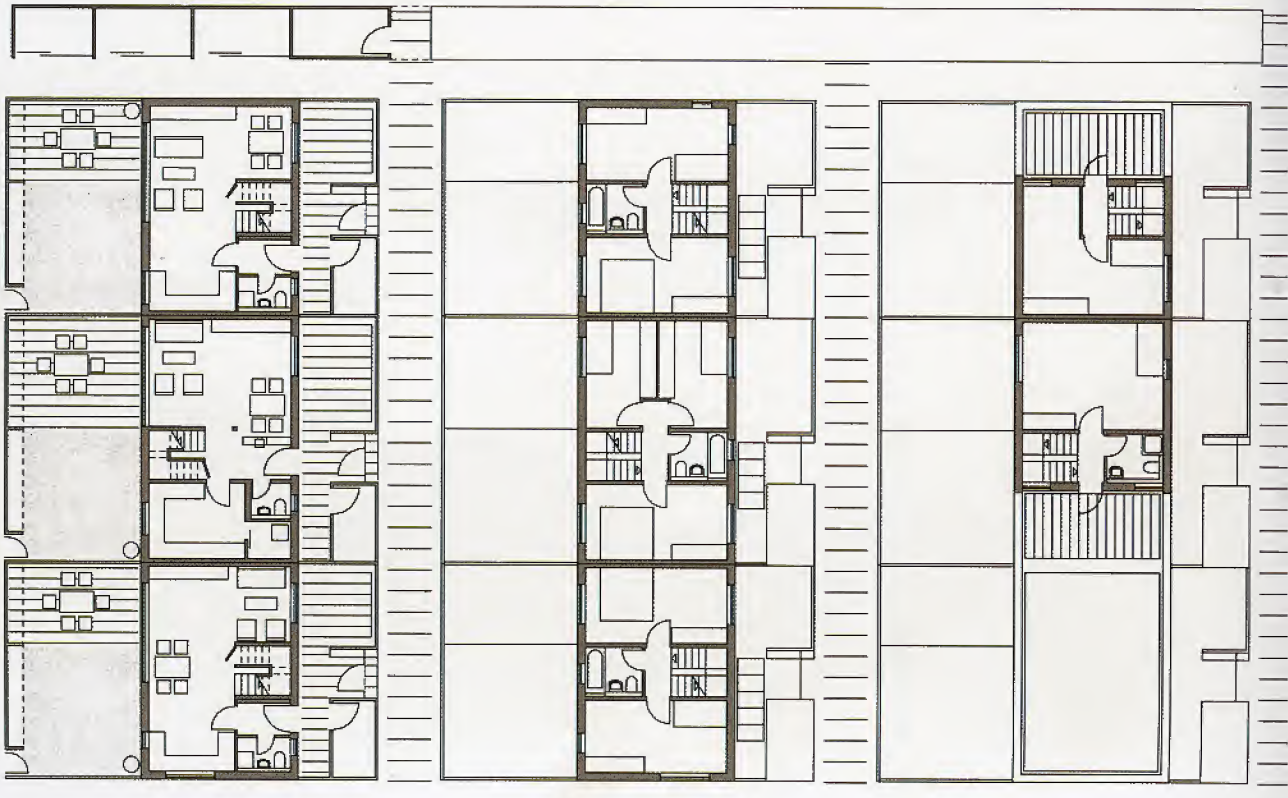

Type 1
Type 3


Type 3
Type 1


Type 1
Type 2

Side elevations to Heinrich-Semlinger stre

The buildings are set on an east-west axis, while the upper floor faces north and south. The living room on the ground floor opens onto the garden on one side and toward the patio on the other.



4 Rooms

5 Rooms

3 Rooms

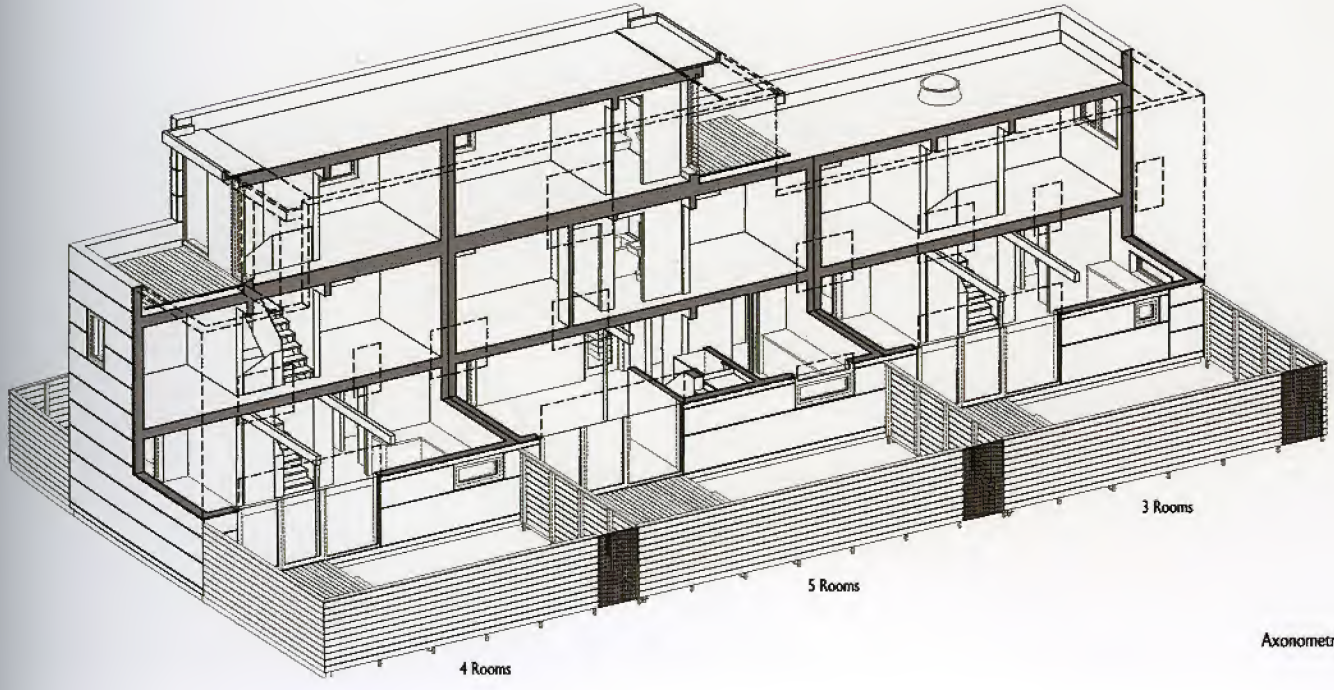
Ground plan

First plan

Second plan

0 2 5 10m

The housing blocks and community center (above) have been built with prefabricated wooden panels, a material chosen because it is inexpensive, energy efficient and sustainable.



Axonometric view of type 1

Carmen Martínez Quesada

Housing in Arroyo del Ojanco

Jaén, Spain

Collaborator: Mario Algarín Comino

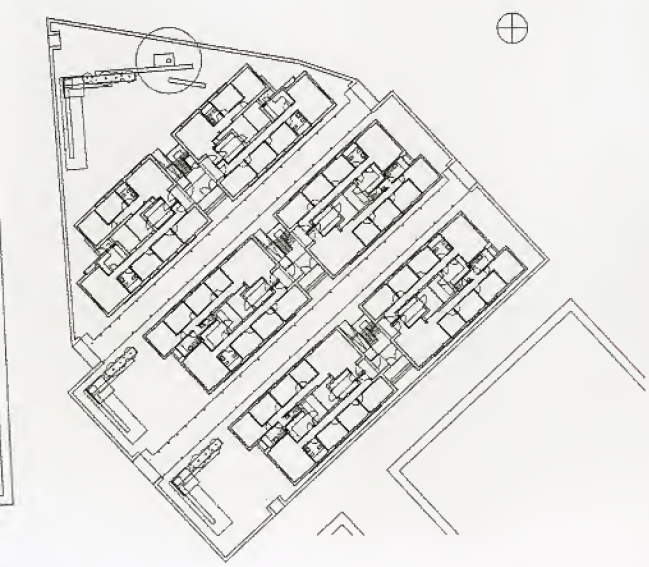
Photographs: Fernando Alda

The scheme for this housing development was the winning entry for a competition arranged by the Public Works and Transport Council of Andalucia's local government. It was subsequently adapted to specific town regulations. Sitting on the main route between Andalucia and Albacete, the town where the complex is located has always had a "passing-through" character with little identity of its own. However, the project is cut off from the urban center, being located in a newly developed zone which has not yet been completely built due to the town's slow growth.

Once the problems in the urban network and the town's layout have been diagnosed, the project will comprise a unified whole that will serve to structure the surroundings. The compositional criteria is maintained in both the longitudinal plots as well as in the triangular one, in an attempt to create a series of parallel longitudinal elements that, while relating to each other, allow a certain permeability from the urban center toward the exterior and the perimetral road. The apartments are organized around a central stairway in a surprisingly asymmetrical disposition, which is a variation on the typical symmetrical organization of this type of building. The buildings facing the town are two stories high, and three on the road side.

The interior of the blocks is arranged with a system of three parallel bands. The two exterior ones are used for living rooms and bedrooms, and the interior band houses the service areas and a patio. This scheme of juxtaposed bands produces very solid and defined limits toward the exterior, while the interior elements are placed with greater freedom. This produces dislocations on each floor, which emphasizes both the horizontal division of the whole and the perception of the patio's exterior space from the apartment's interior. The structure proposed for each unit is a result of the selected building type.

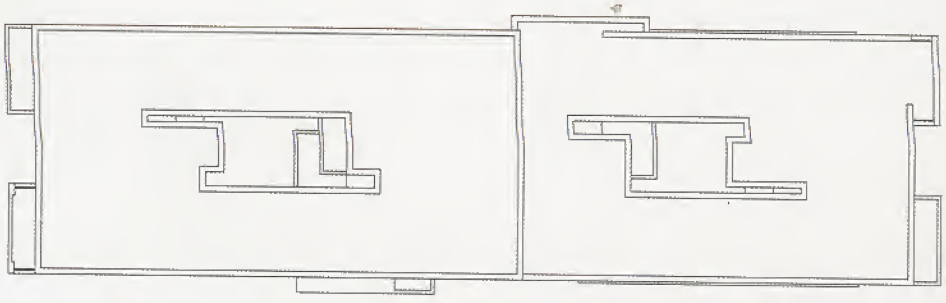
The complex is located on a housing estate on the outskirts of the town, which is set on the main route between Andalucia and Albacete.



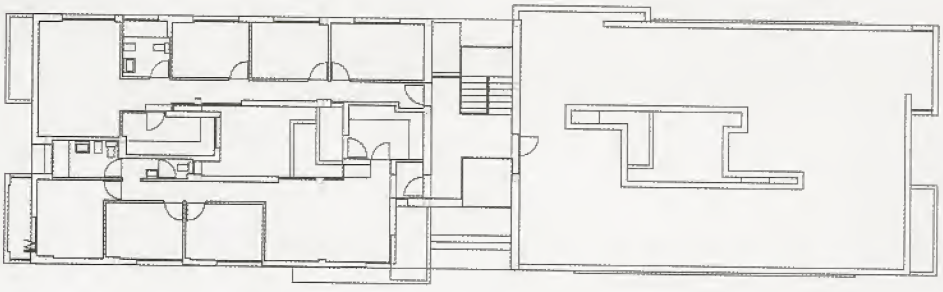
The complex is situated on three plots (two rectangular and one triangular) following a unique compositional scheme. The buildings are two stories where they face the town and three on the side abutting the road.

The spatial relations between the blocks offer a great diversity of perspectives, creating at the same time a unified look permeated by different views.

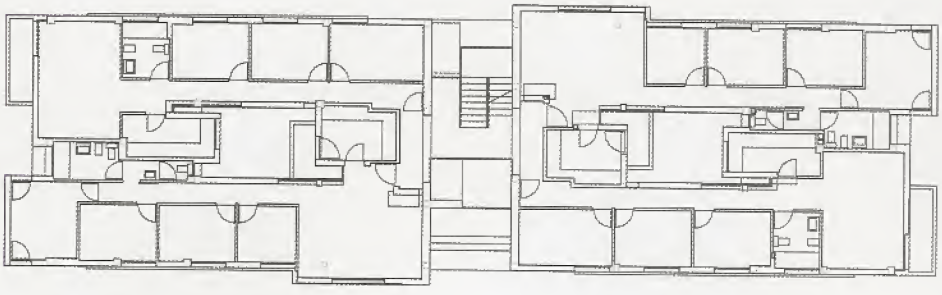
Floor plan of the buildings situated on the rectangular plots.



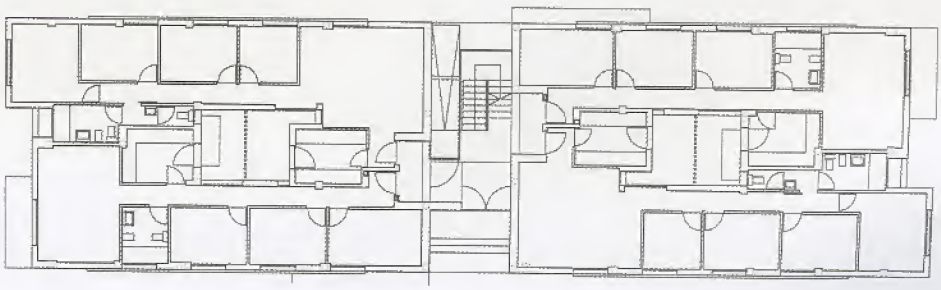
Roof Plan



Second Floor

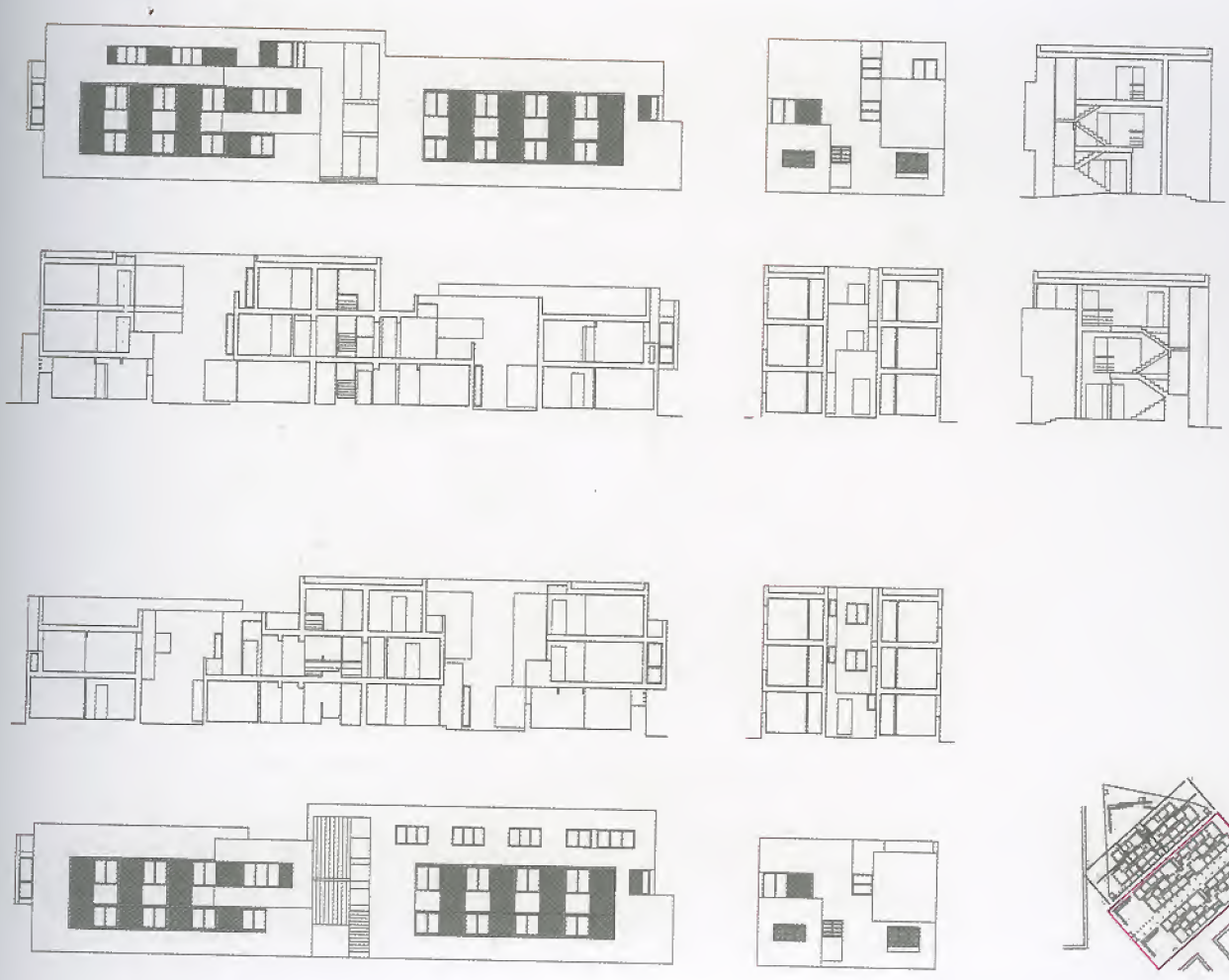


First Floor



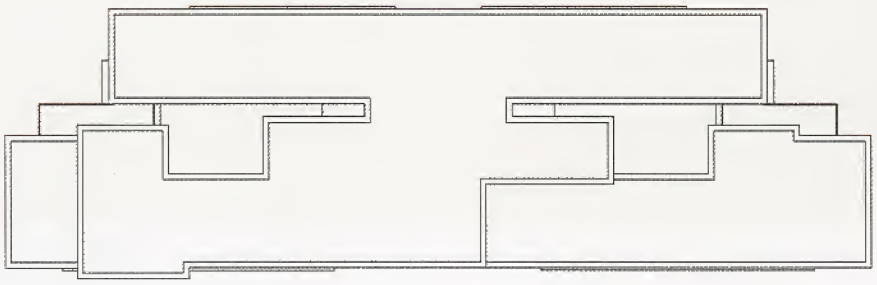
Ground Plan

The project attempts to make each apartment unique, thus singling them out through their different orientations. The solution proposes an alternative to a possible façade as a result of an addition of identical openings distributed along the different floors.

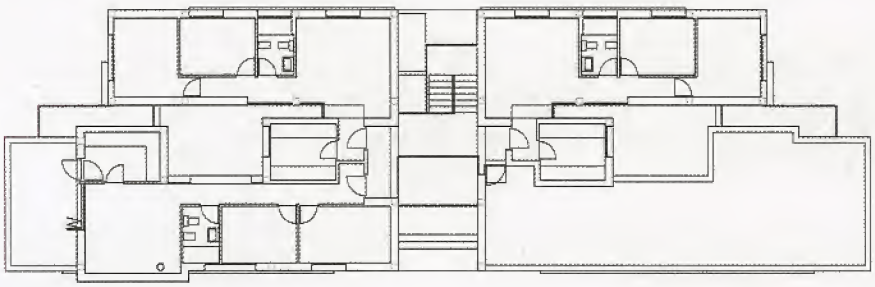


Elevations and sections of the buildings set on the rectangular plots.

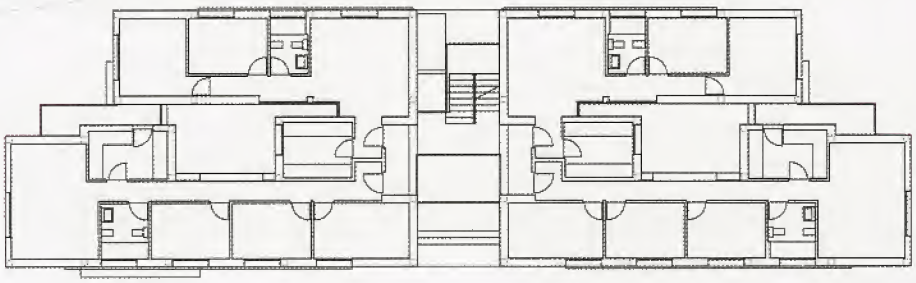
Floor plan of the building situated on the triangular plot.



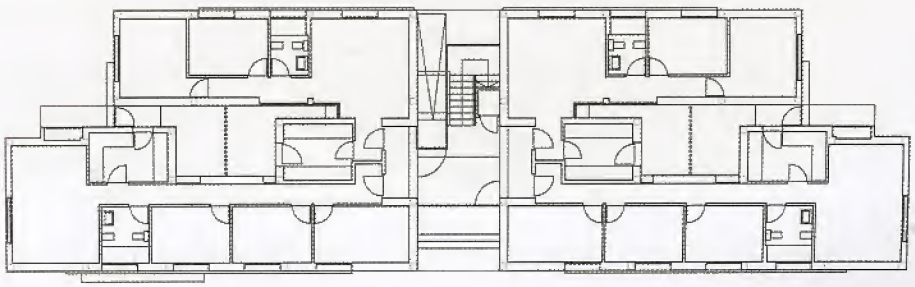
Roof Plan



Second Floor

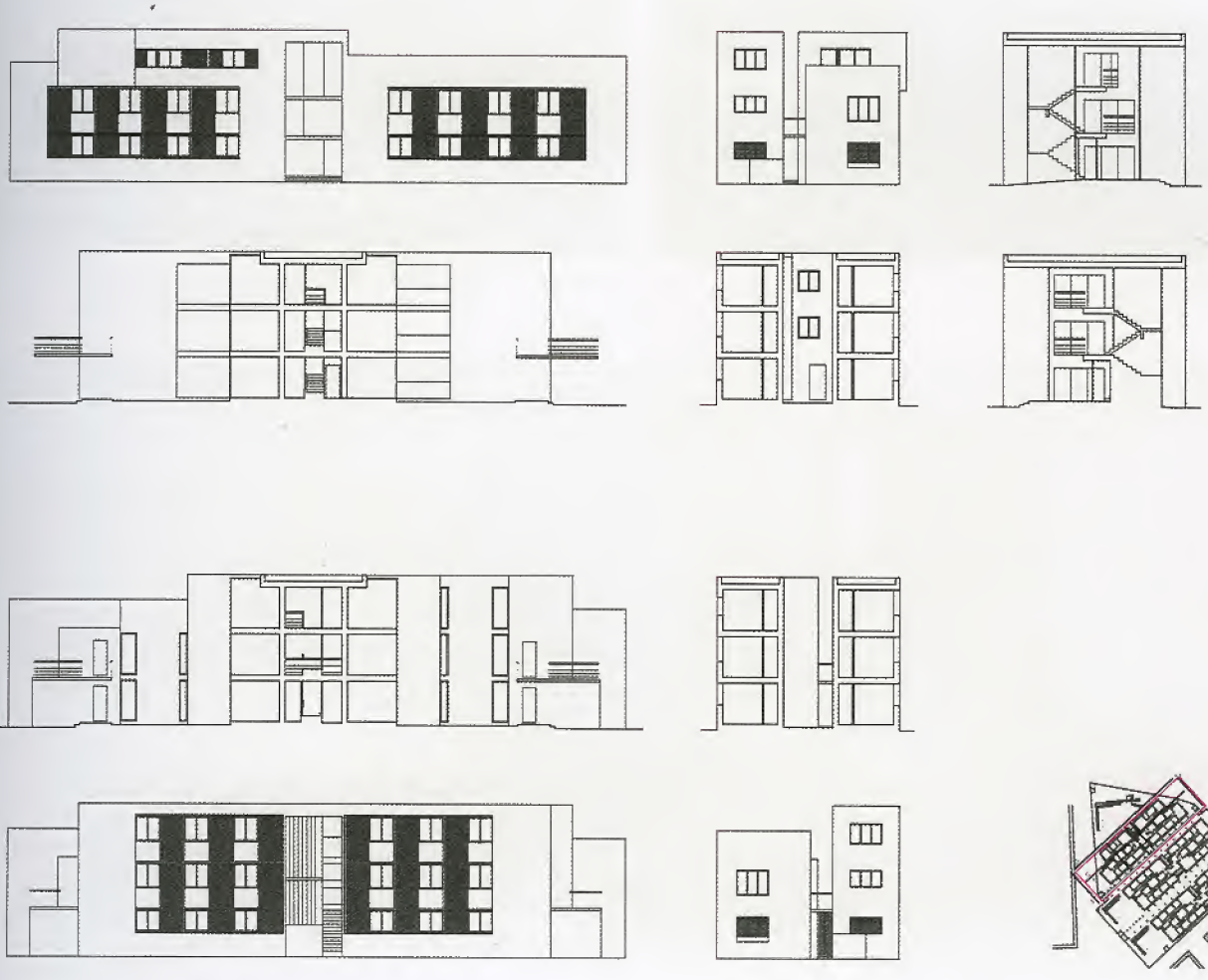


First Floor



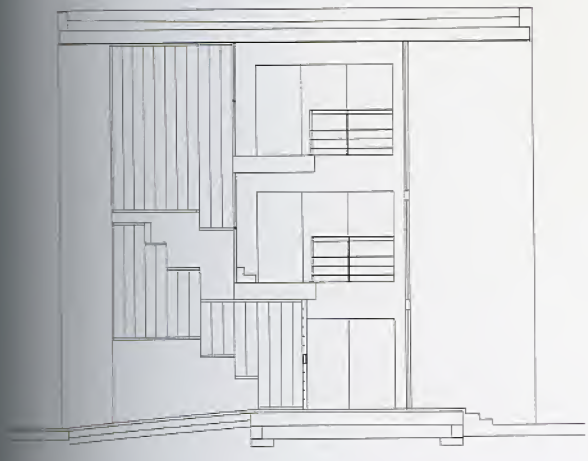
Ground Plan

The situation of the exterior rooms is used as an instrument to compose the façade, which reflects the spatial structure of the interior both with the elements that are set in relief and in the voids.



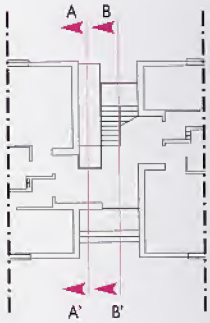
Elevations and sections of the building situated on the triangular plot.

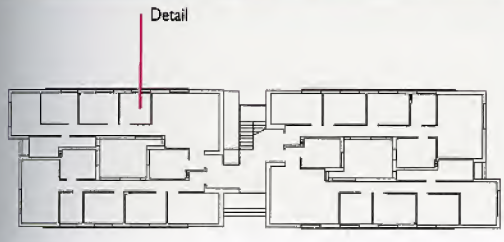
The longitudinal scheme is interrupted by the stairway, which is situated as a transitional volume connecting the façades of each building. The stairway creates a triple-height access portico

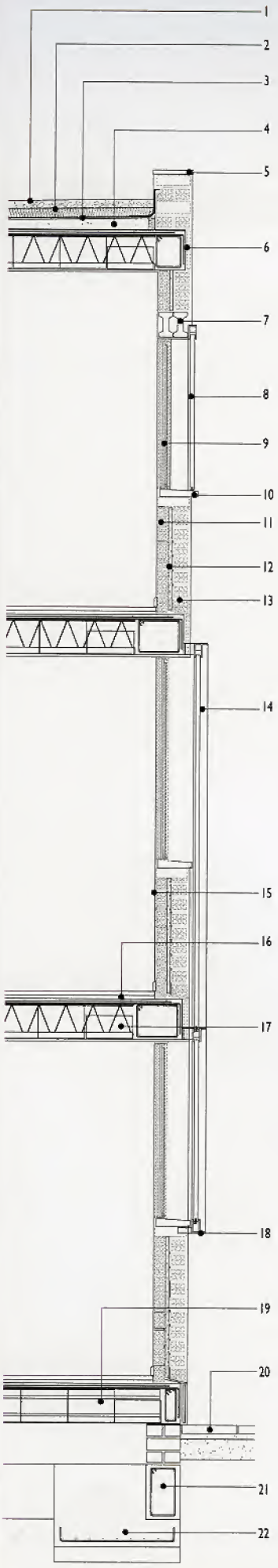


Section A-A'

Section B-B'







1. Washed gravel layer, e=5cm.
2. Unwoven geotextile felt.
3. Floating asphalt sheet reinforced with polyethilene.
4. Lightweight concrete.
5. White artificial stone finish, e=2cm.
6. Ceramic tile covering floor slab and pillars.
7. Loading bay to create lintel: precast reinforced concrete girders.
8. Galvanized steel sliding shutter with fixed slats.
9. Galvanized steel plate joinery.
10. Artificial stone windowsill, e=4 cm.
11. Double airbrick partition wall, e=7 cm.
12. Expanded polystyrene, e=4cm.
13. Air brick wall.
14. Galvanized steel sliding shutter with fixed slats.
15. Straight tempera.
16. Polished and enhanced 40x40 medium-grain terrazzo.
17. Precast joist slab with concrete vaults, e= 25 + 4cm.
18. Profiles and support plates with 10 mm hot dip galvanized sheets.
19. Precast joist slab with concrete vaults, e= 25 + 4cm.
20. Precast self-supporting concrete slab over sand layer.
21. Supporting slab beam and supporting slab tie beam.
22. Reinforced concrete footing.

Fuensanta Nieto & Enrique Sobejano

Housing Facing the SE-30

Seville, Spain

Photographs: Fernando Alda

Like other Spanish capitals, Seville's rapid growth since the '60s and '70s has generated dense and dispersed urban areas, accentuating the discontinuous character typical of the development of contemporary cities. The massive construction of self-built houses in the slums of La Plata and Padre Pío as well as the high rise blocks in the areas of Garcia Lorca and Trébol, towards the east of the city, was carried out during those years.

During the decade of the '90s, new infrastructure (airport, train station, highways) sprung up in the central and peripheral areas of Seville, generating interstitial spaces - empty lots which demand the construction of new public facilities and housing.

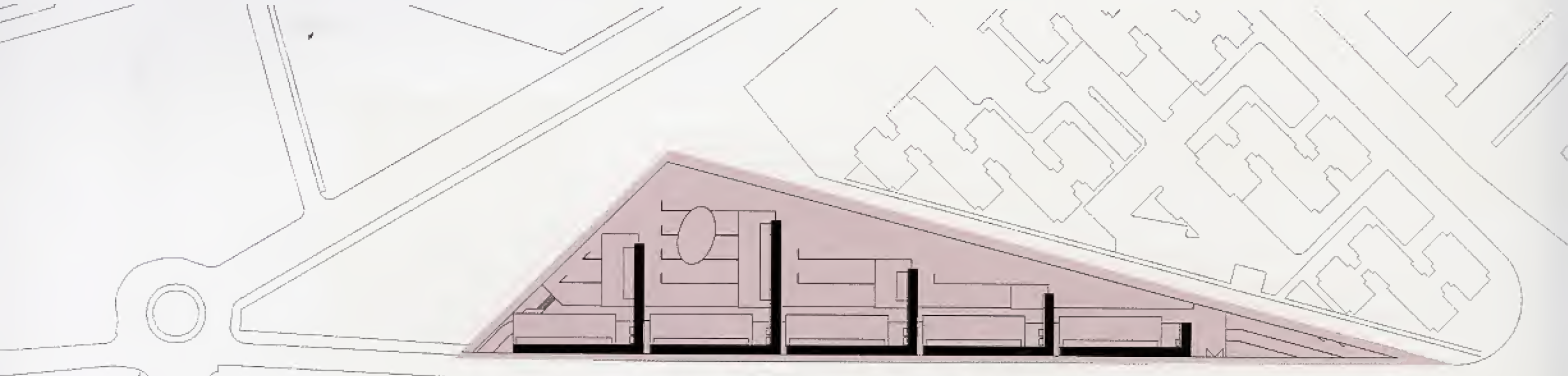
Highway SE-30 constitutes a real physical barrier: aggressive due to the chemical and acoustic contamination it produces and at the same time attractive because of the new perception of the city it generates. Highways are configured by the necessities derived from the flux of vehicles. From a car we perceive a new urban reality colonized by signals, gangways, and constructions where we can hardly recognize the human scale of traditional architecture.

To pose the housing project proposed by EUROPAN under these circumstances required not only the effort to blend new lifestyles with the limitations imposed by reality but, above all, it demanded a reaction towards the new condition of an architecture subordinate to infrastructural decisions, foreign to architecture itself.

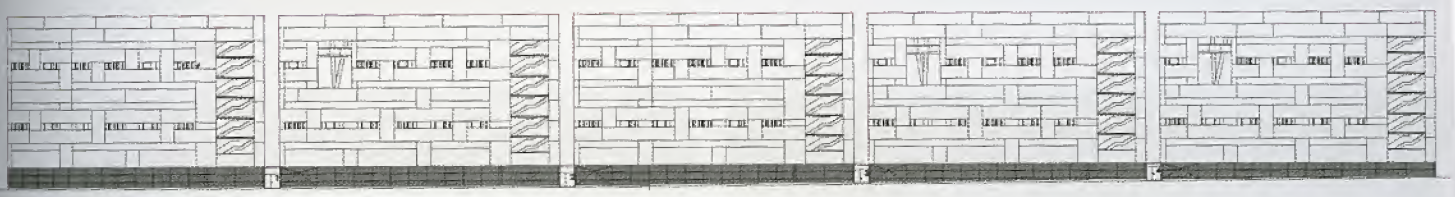
The new building is defined by placing a group of acoustic barriers in front of the highway. The geometry that rules the formal structure of the buildings sets the norm for its construction system.

The image of the interior façades is generated by the modulation of parallel porticoes, which also provide an economic solution for both the parking and the building's structure. 174 apartments have been built, 114 of which will be duplex and 60 will be developed on one floor. All the housing units have a useable surface area of under 70 m², with only two different variations, duplex unit with the access through an exterior corridor or single floor unit accessed from an interior hall. The multiple mutations of a pre-cast wavy concrete panel transform a humble social housing block on a highway into an unexpected, almost musical, sequence generated by light, shadows, rhythm and silences, solids and voids.

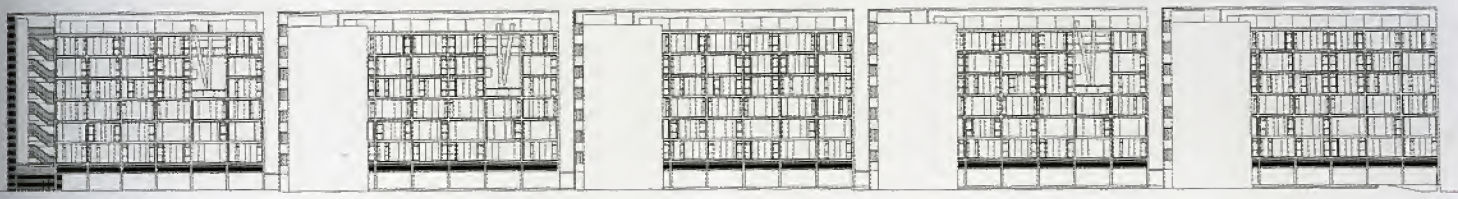
The new building has been conceived with a series of barriers facing the highway. A repetitive pattern perceived only at great speed due to small but continuous variations. The dwellings are shielded from the highwa
five large volumes that act as acoustic barriers.



Five "L" shaped volumes are situated above a common garage. The different volumes vary in size, and are adapted to the shape of the lot.

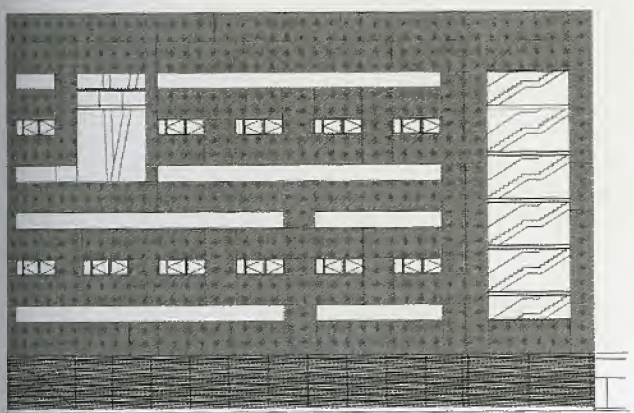


Elevation on the SE-30

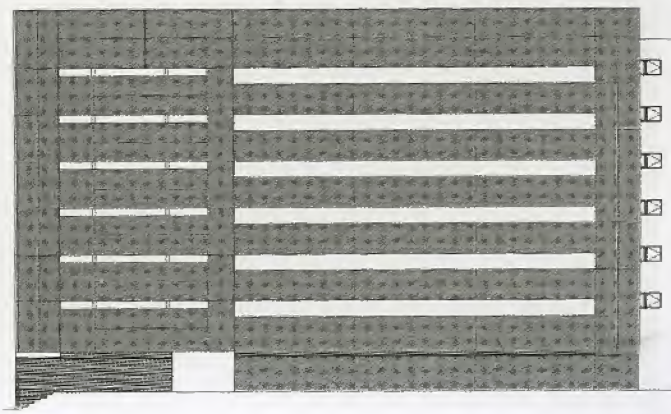


Interior elevation

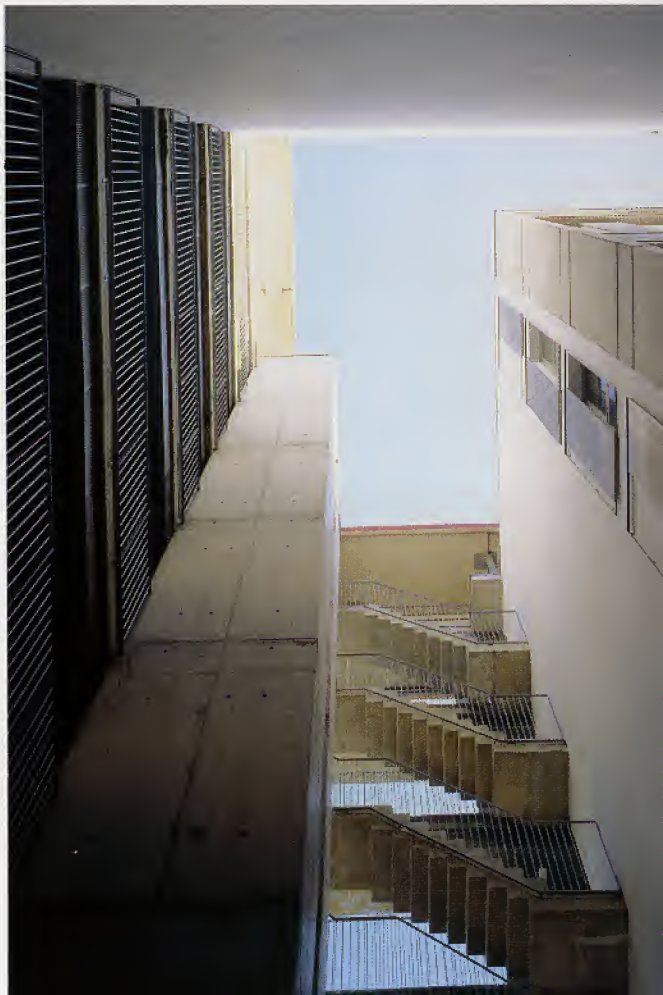
Elevation on the SE-30, access 2



Side elevation, access 2

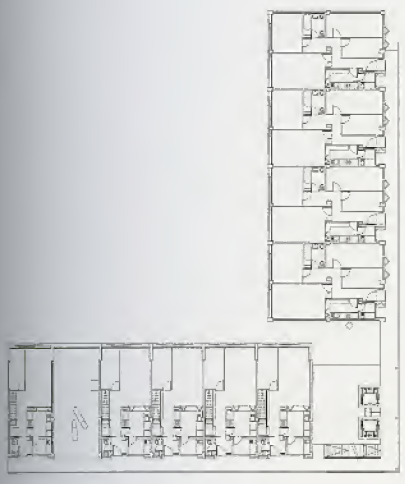


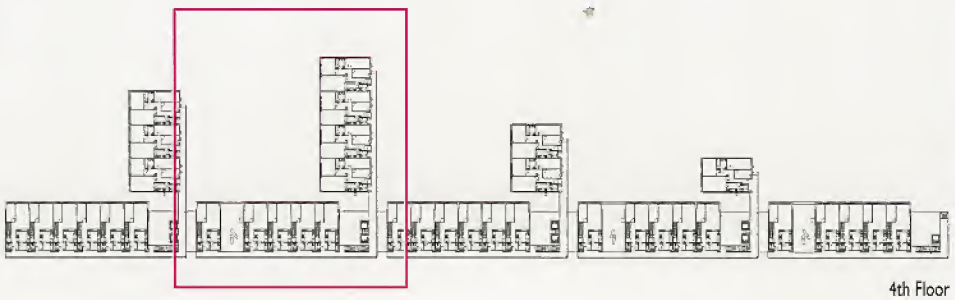
The stairway landings and access corridors benefit from the exterior light that gives these spaces a special quality.



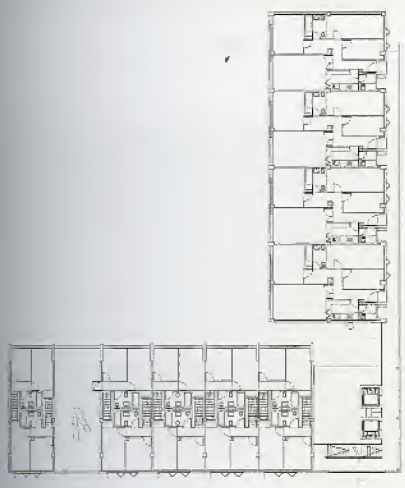
Section A-A'

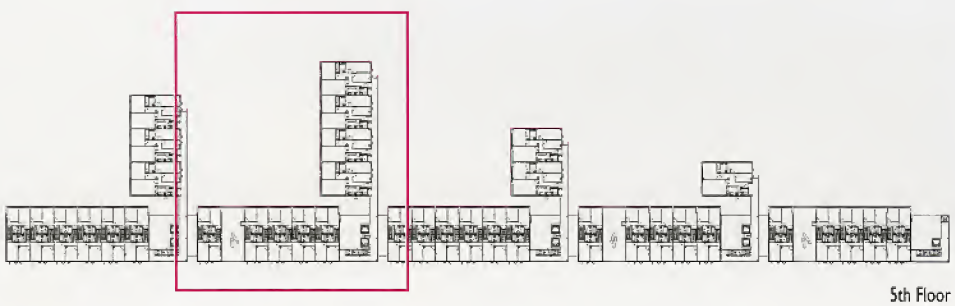
There are two different housing types: single floor apartment accessed through a corridor, and duplex apartments accessed from exterior corridors, with the living rooms facing the garden and the corridors directed toward the highway.



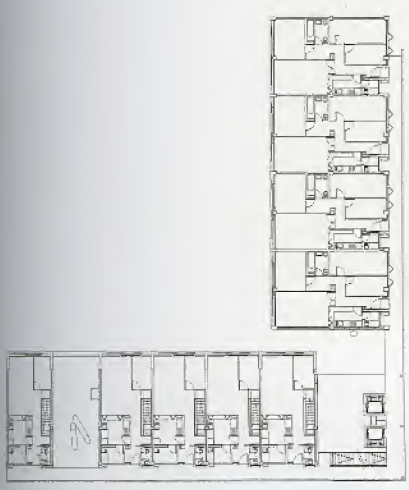


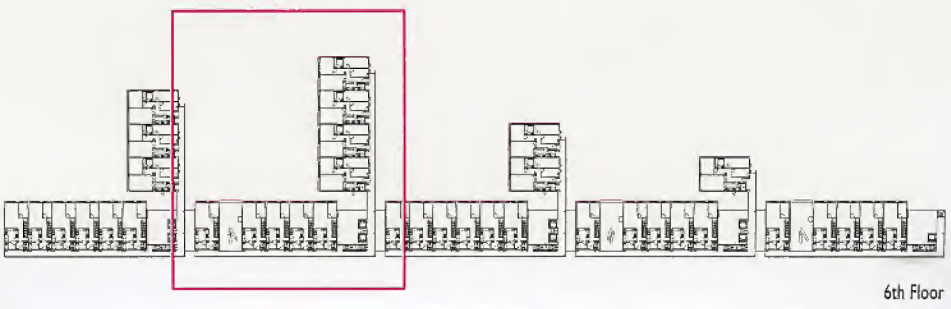
4th Floor





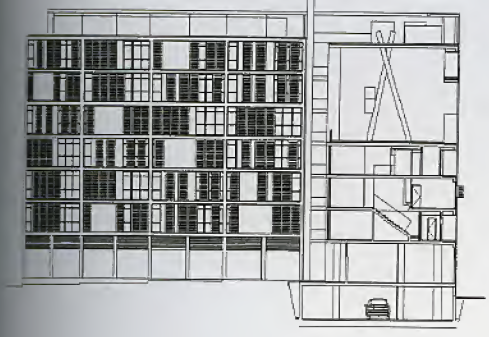
5th Floor



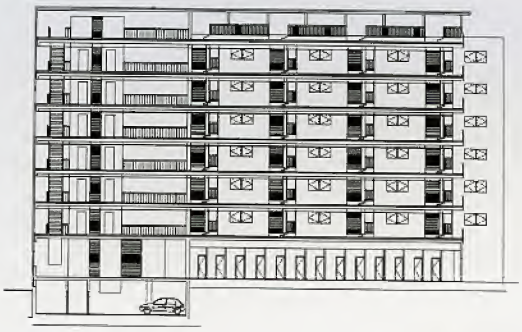


6th Floor

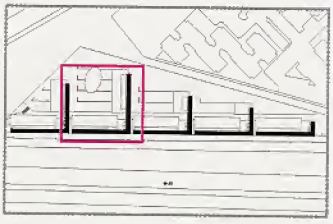
The building spreads toward the interior of the plot in a chain of community gardens. The modulation of parallel porticoes generates the image of the interior elevations. Large pre-cast concrete panels embrace the seven-story high portico system.

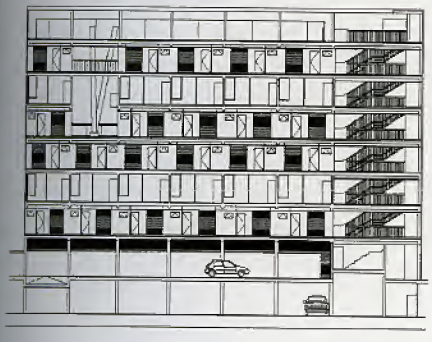


Section A-A'

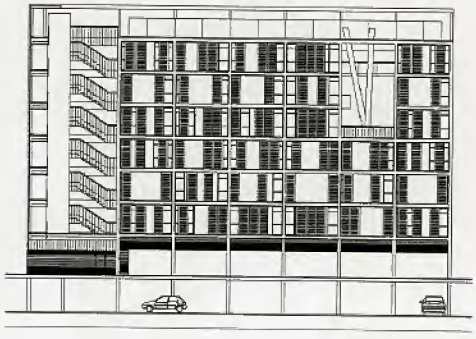


Section B-B'

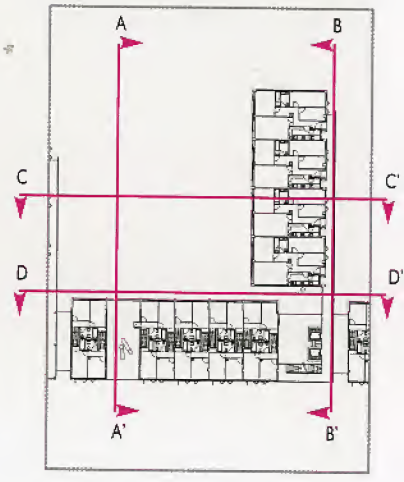




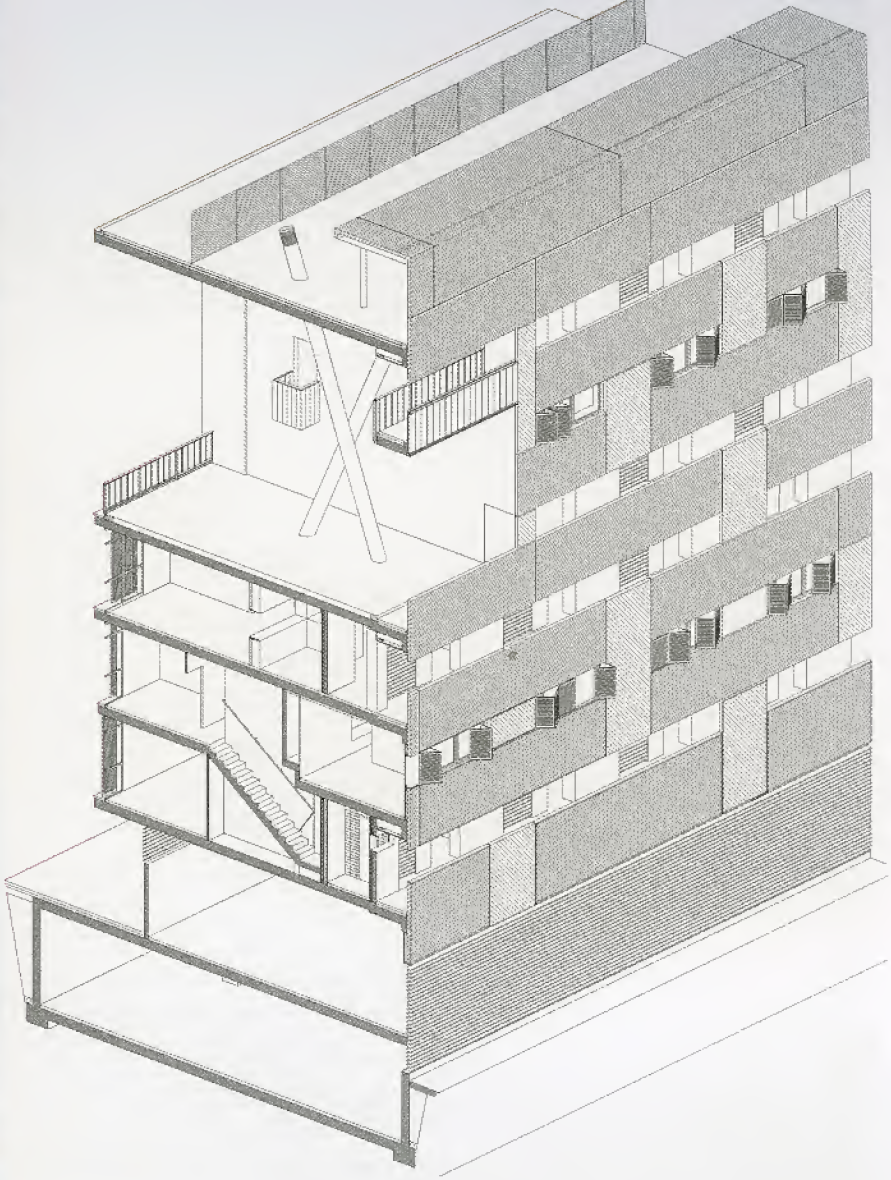
Section C-C'



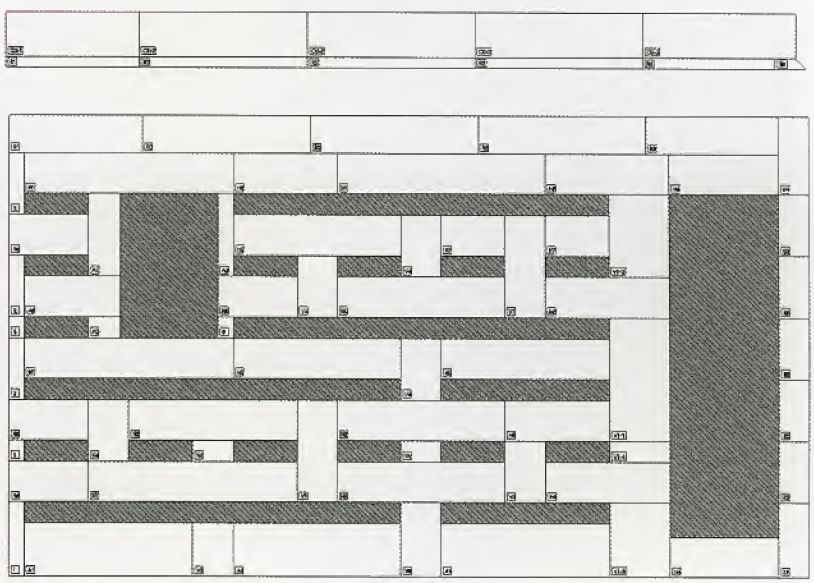
Section D-D'



The panels have been configured with diagonally-placed molds taken in concrete of corrugated metal. These have been stained with iron rust in intentionally irregular coloring. The combinations of the corrugated concrete panels produce infinite variations of brightness and opacity, color and texture.



Axonometric section of the main volume of the building.



Pre-cast panel layout on the highway façade.

Neutelings Riedijk Architecten

Hollainhof

Ghent, Belgium

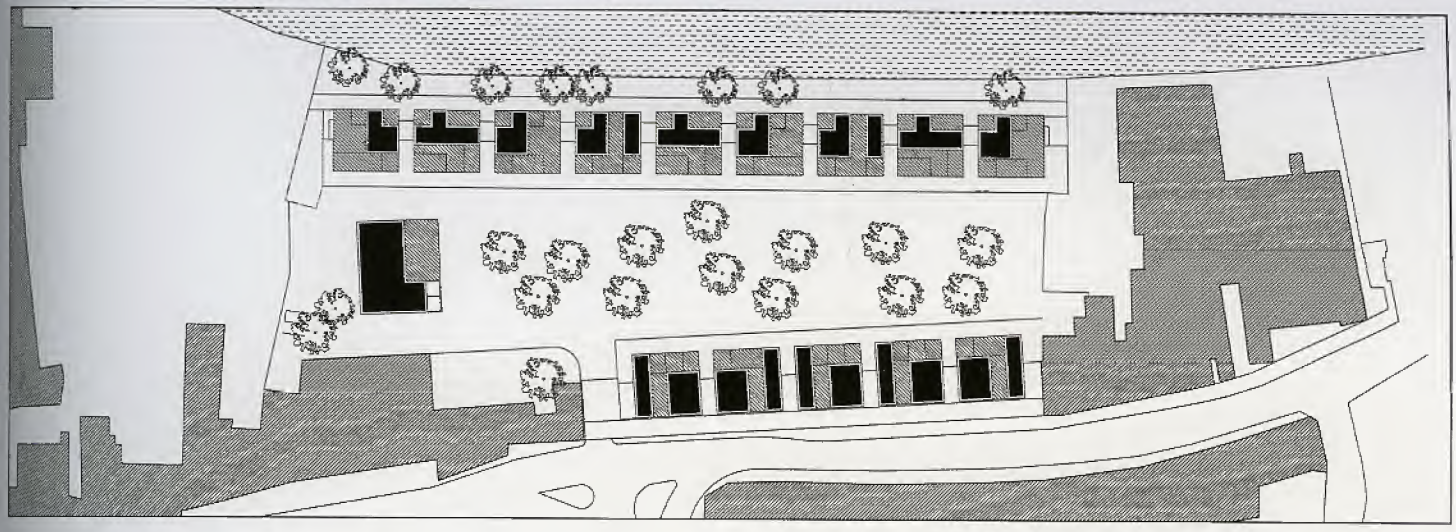
Photographs: Christian Richters

The Hollainhof is a social housing complex located in the center of Ghent. The project aims at creating an attractive habitat combining the quality and density of the urban surroundings with privacy and peacefulness. This is achieved by updating the traditional residential type. The result is a complex that fluctuates from public to private, open to closed, large- to small-scale.

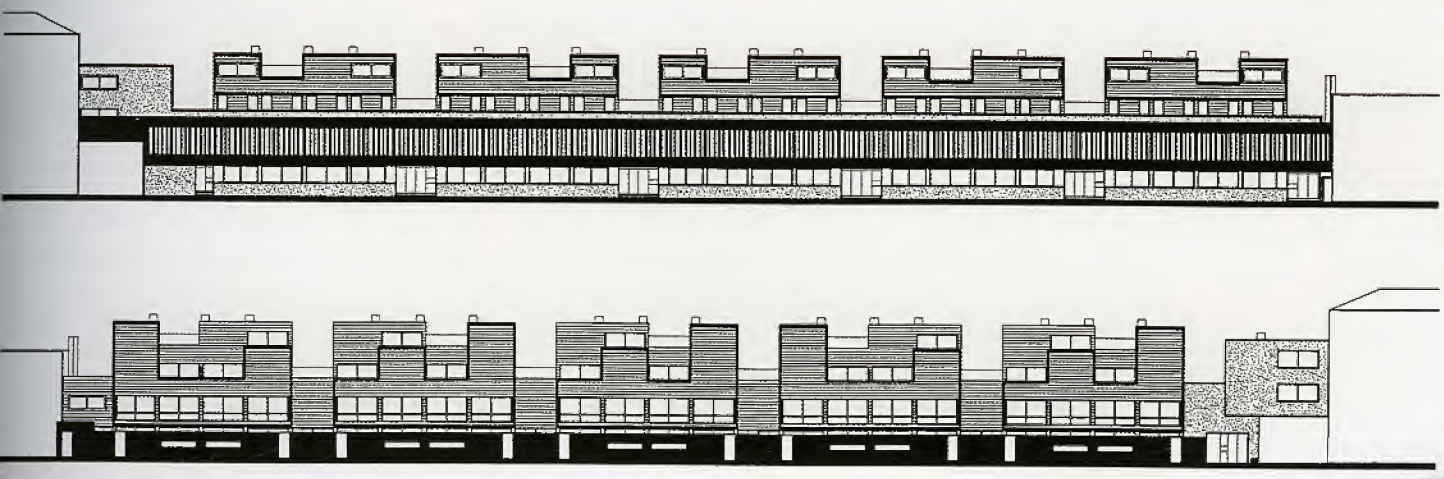
The dwellings are grouped in two strips, one of them following the street and the other facing the river. The strips are composed of fifteen blocks with ten to eight dwellings each. There is a large open-air garden between the strips. A large underground passage connects the street to the garden that gives access to the houses, which have their own private garden.

The dwellings of the lower levels have the bedrooms on the ground floor and the daytime areas on the first floor overlook the square. The apartments in the upper level are accessed through exterior stairways and large terraces on the roof. Overall, the project generates a great variety of dwellings in a series of sculptural blocks, each one with its own identity.

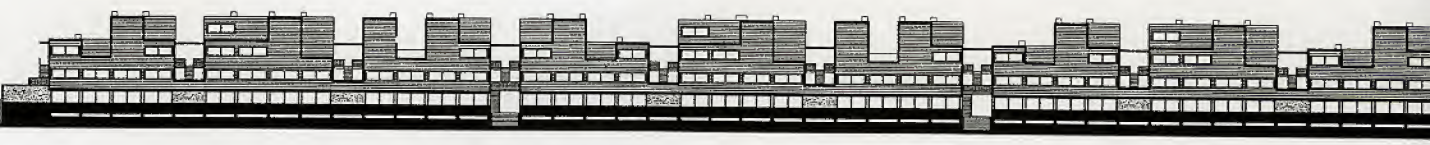
The garden walls are of prefabricated concrete dyed with terra cotta. The blocks, clad in cedar wood, stand in a dark gray, reinforced concrete plinth. As time goes by the cedar wood will gradually turn gray. One of the pavilions inside the garden hosts a nursery and there is an underground garage beneath the block facing the river. Some of the dwellings facing the street are accessed through a loggia on the first floor. This elevation emphasizes the complex's scale and character.

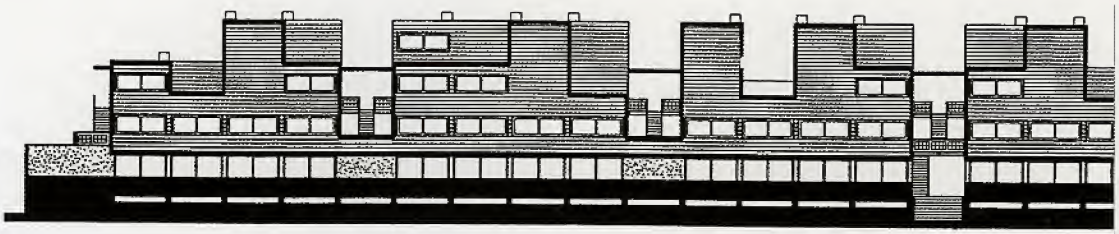


The complex is composed of two housing strips facing the street and river, with a large central garden between them.



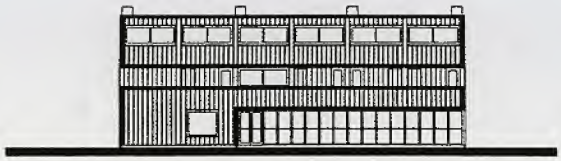
Elevations of the street-side blocks

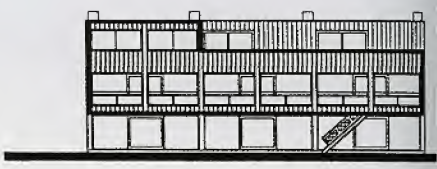


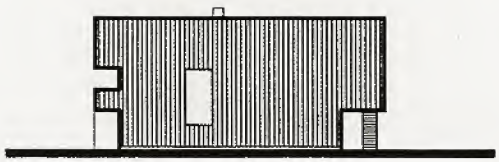


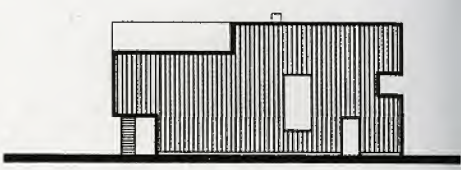
Elevation of the blocks facing the river

Elevations



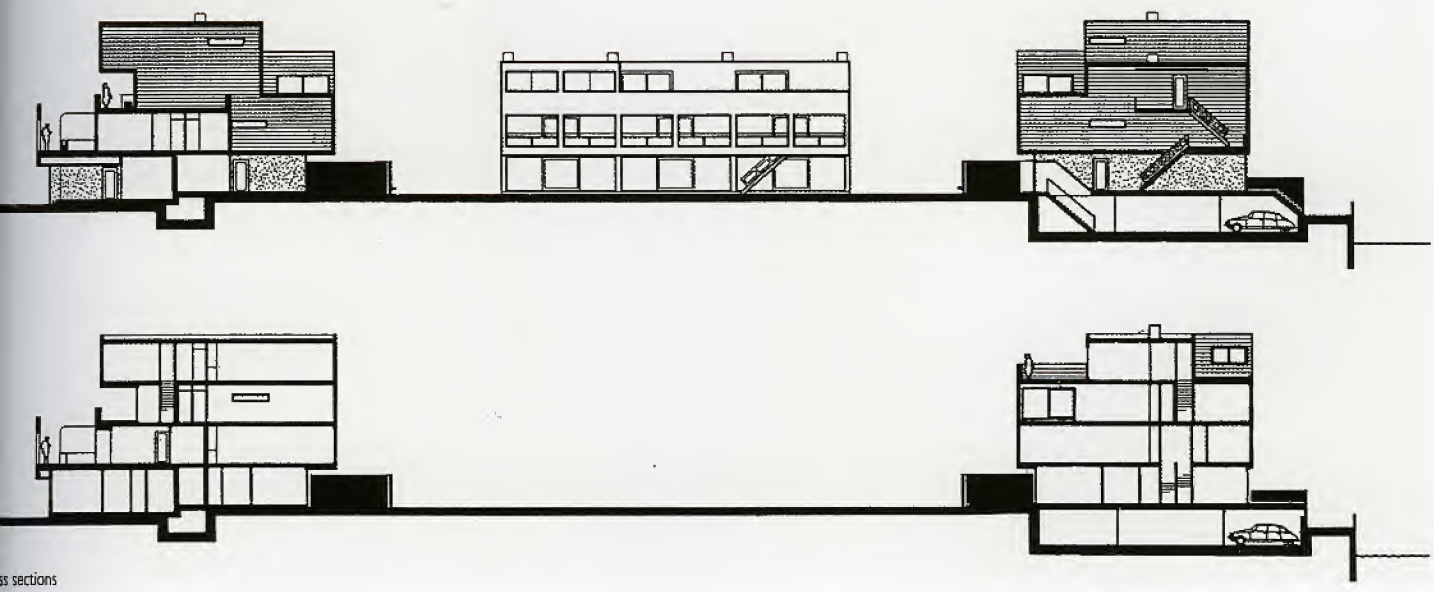






A large accessway at one end of the complex provides vehicular entry into the inner courtyard for the dwellings located alongside the river.

The materials used give the project a forceful presence, with the terra cotta colored concrete garden walls and blocks clad in strips of cedar, which will acquire a grayish tint over time, in consonance with the dark gray, reinforced concrete plinth.



ss sections

Barto + Barto

Space Maguellan

Nantes, France

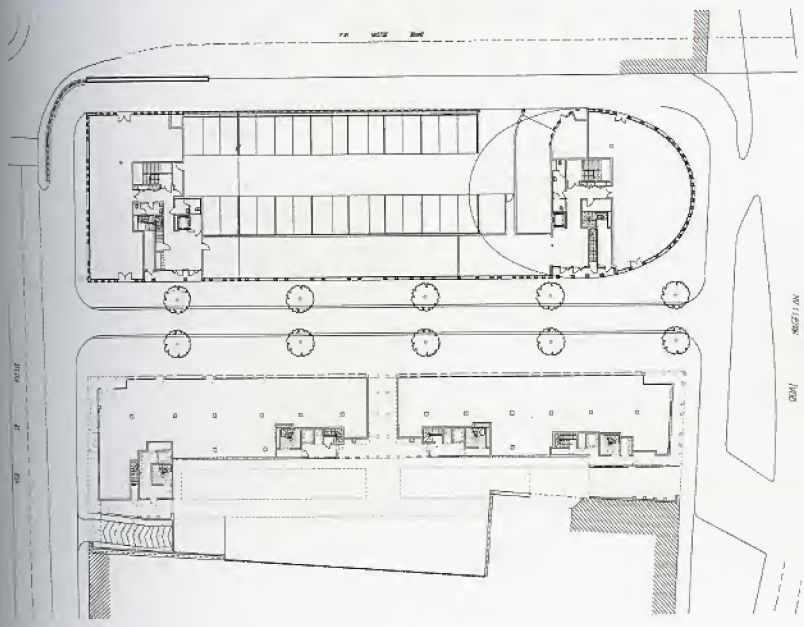
Photographs: Roland Halbe / ARTUR

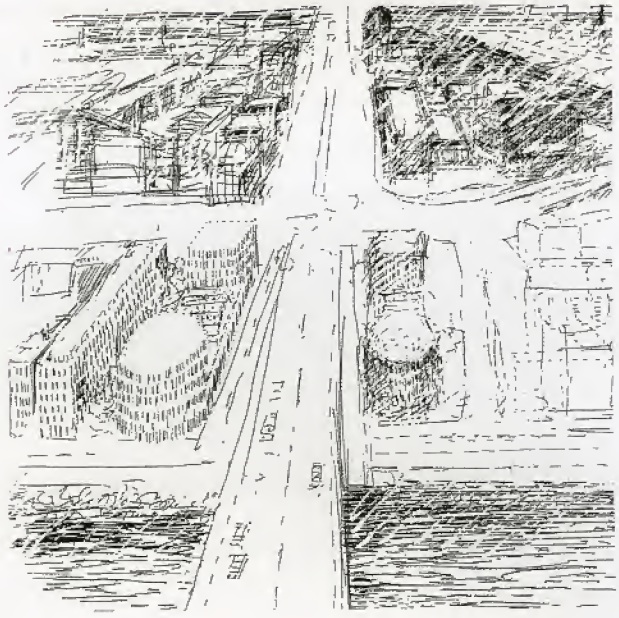
The riverside of the Bras de la Madeleine is a reflection of the erratic urban development of modern times: an ungainly juxtaposition of low quality buildings. Towers, huge horizontal blocks from the '60s and '70s, and the worst of private investment's post-modern office and housing buildings all come together to create an unfortunate landscape. Furthermore, some sections of the shoreline still remain untouched.

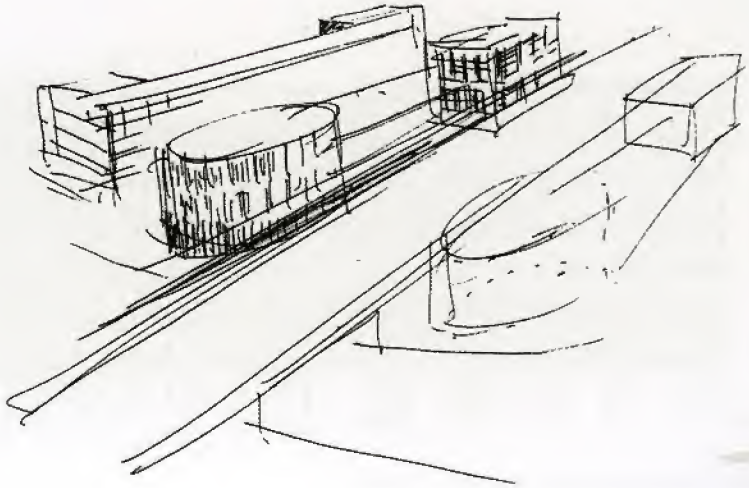
The Magellan islet is formed by an extensive horizontal block of 78 apartments situated parallel to the bridge, and two office buildings close to the bridge, a cubic one and an oval one joined by a common plinth. A street separates both elements and opens the development toward the Loire. The enclosure between the openings forms an abstract scheme in the façade of the linear housing block. Clotilde and Bernard Barto used this scheme to compose voids of different depths through the creation of loggias, windows and voids or filled wall sections.

In opposition to this, the office buildings propose elongated windows in a random disposition. The number of windows diminishes as the buildings increase in height. The result is an enigmatic world, a dream-like situation generated by this interplay of relationships, scales, and shadows.

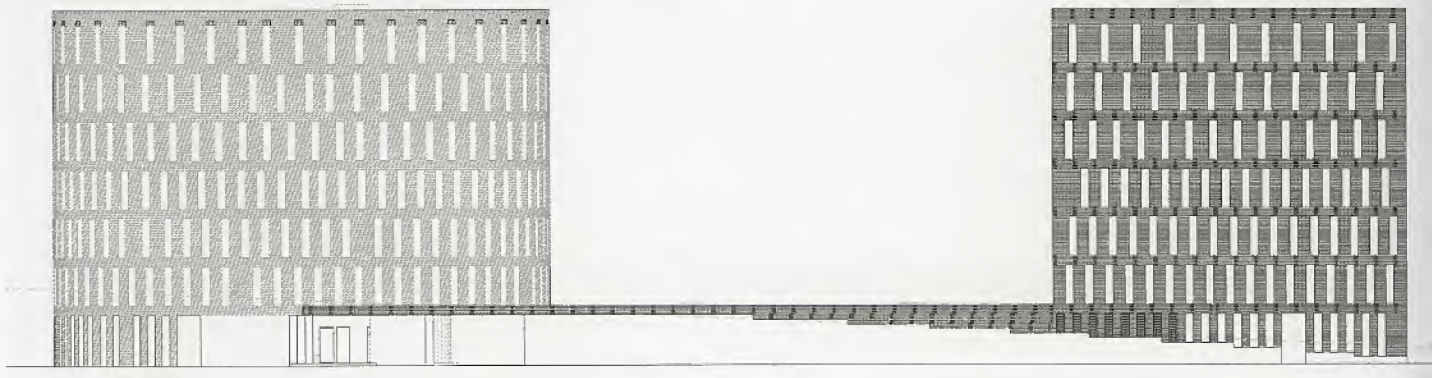
Placing this project in the peripheral neighborhoods facing the Loire was a key issue in the general strategy to develop this new neighborhood. The investors planned the combination of housing and office buildings, but the volume and material selection was the architect's choice. The interior organization of the buildings was conferred to the investors and their agents. The office buildings suffered from a banal procedure of private investment: the absence of supervision during the construction process. The architects worked to find a solution suitable for all parties through the use of a common brick coating in a precise placement of the elevations and a 1:1 prototype of all the façades' elements.



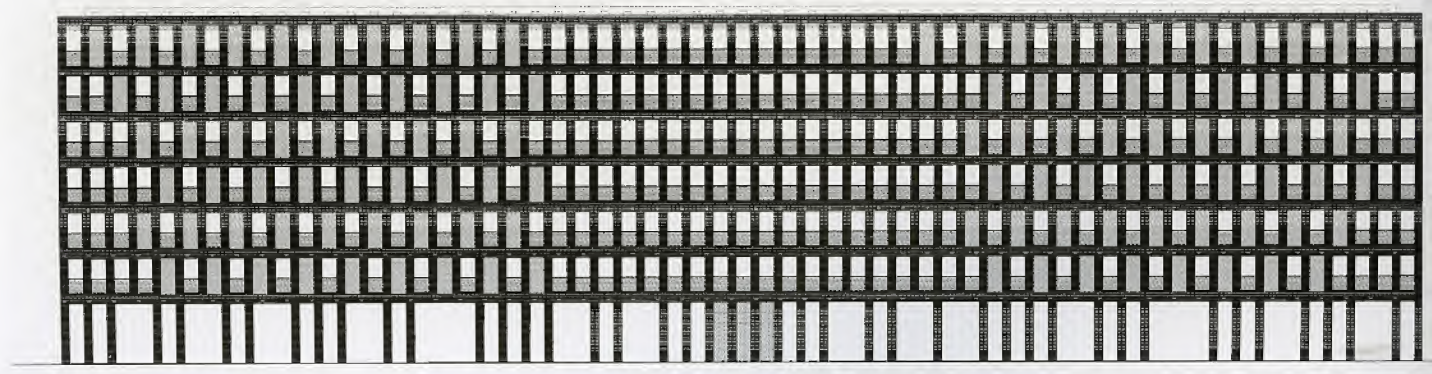




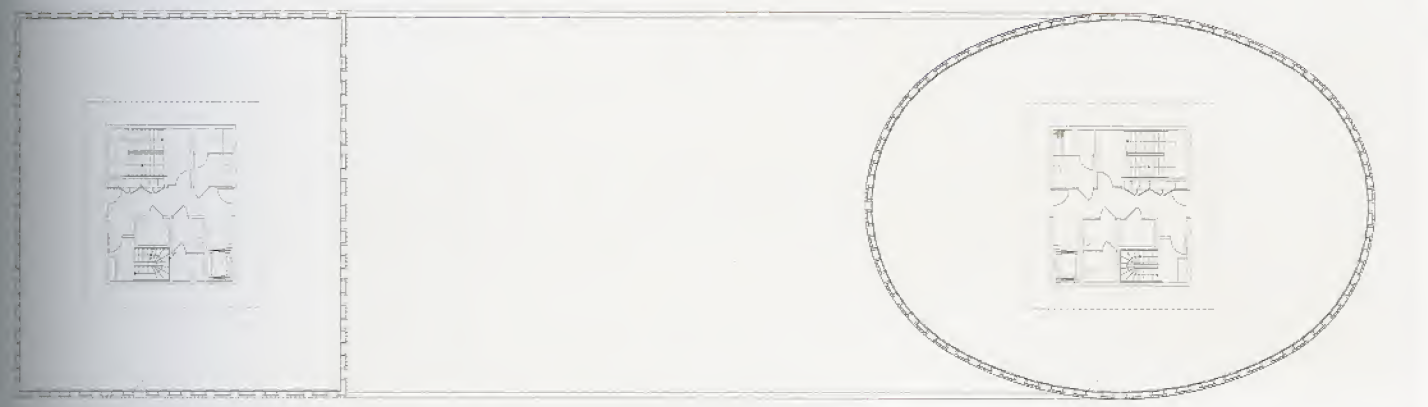
A large horizontal block of 78 apartments and two office buildings joined by a common plinth, a cubic one and an oval one forms the Magellan islet.
The contrast between the floor plan and the volume of both typologies disappears with the same exterior skin used to clad all the façades of the exterior elevations.

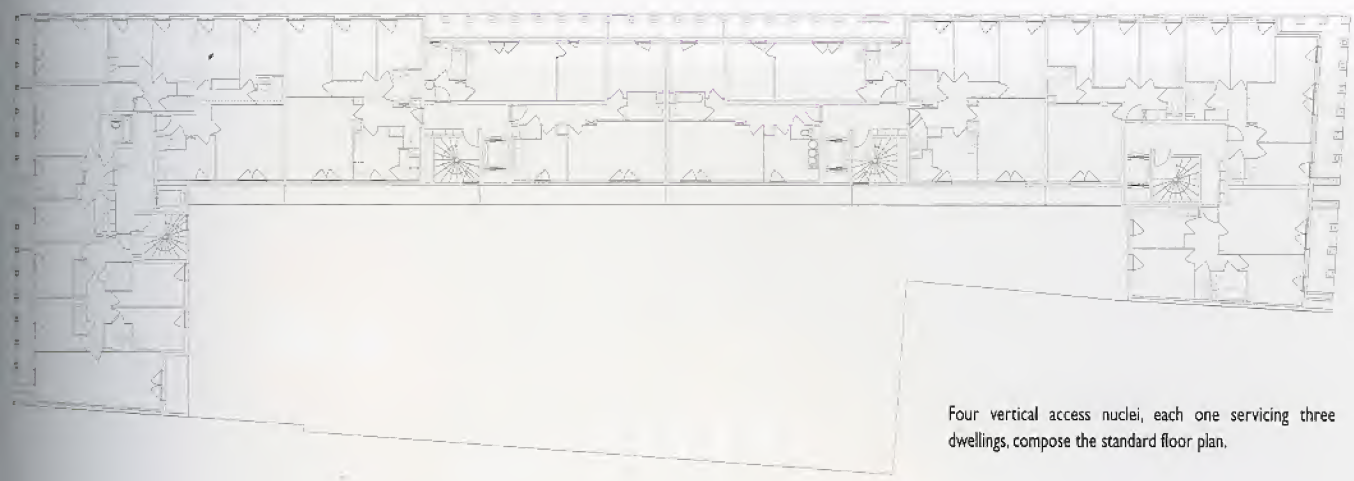


Office building elevations, towards the interior street and towards Aristide Briand's bridge.

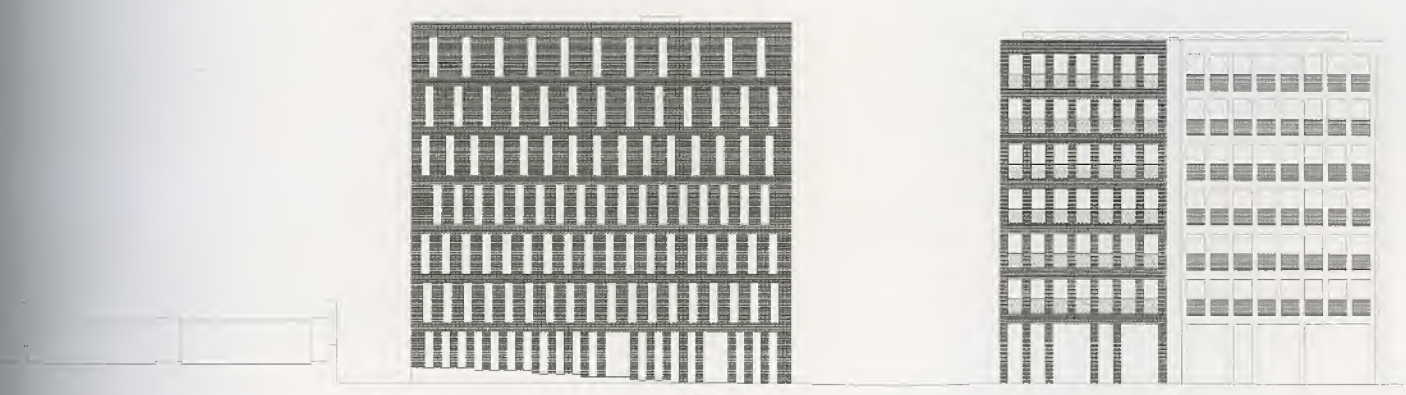


Longitudinal elevation of the housing building.



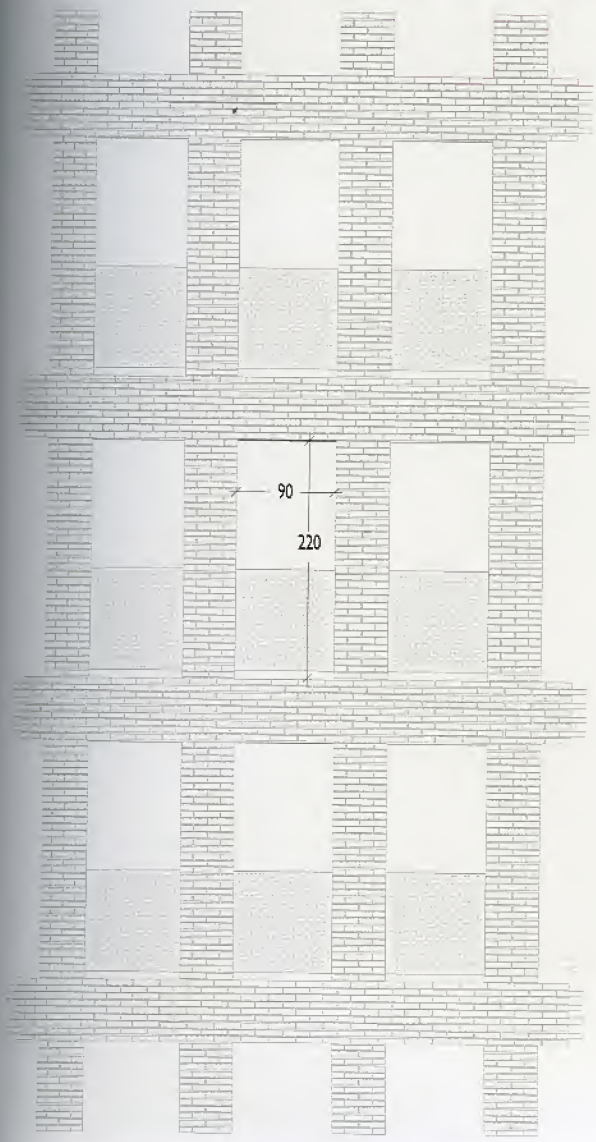


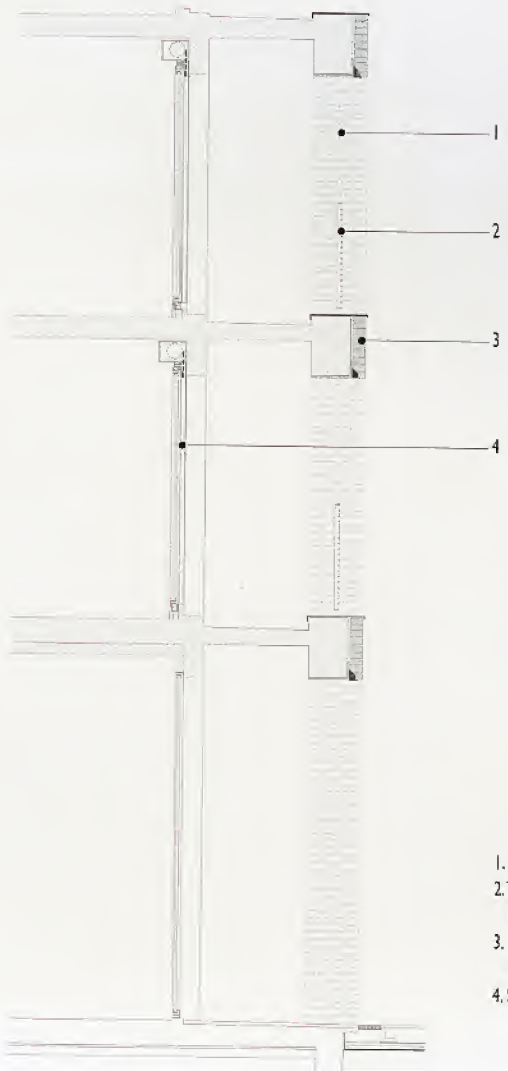
Four vertical access nuclei, each one servicing three dwellings, compose the standard floor plan.



Office towers and housing block elevation on the Rue de Rieux

The pattern gains depth with the dark, uniform cuts of the loggias. Below: detail of the loggia.





1. Pillar coated in brick, 240/52/115 mm
2. Thermo-lacquered steel lattice handrail
3. Lintel: brick 240/52/115 mm
4. Single sash PVC joinery, 90 x 217 cm

The finishing for the interior façade is clearly differentiated to the regularity set by the exposed brick in the exterior elevations.

Ignacio Capitán

Plot 7RU of the "La Victoria" Partial Plan

Photographs: Fernando Alda

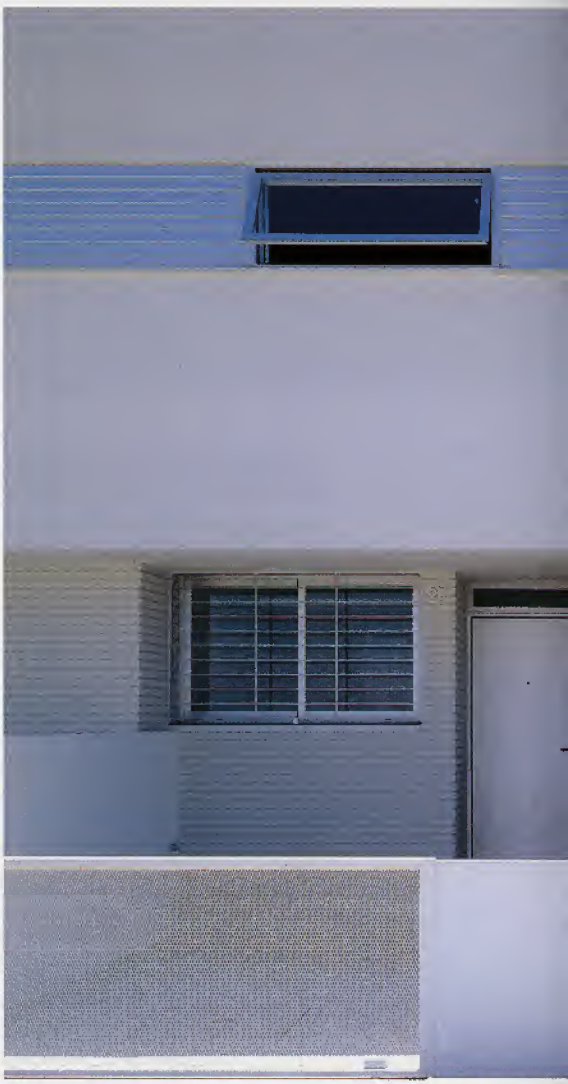
Morón de la Frontera, Spain

This building is situated in plot 7RU of "La Victoria" partial plan, on the northern edge of Moron de la Frontera's urban center. The area had previously been developed, built, and lived in, producing a quite uniform and uninteresting landscape of economic row houses. On the other hand, given the height of the plot, the complex would enjoy long views toward the surrounding fields. The cemetery abutting the site has been incorporated into its lower edge as a large garden.

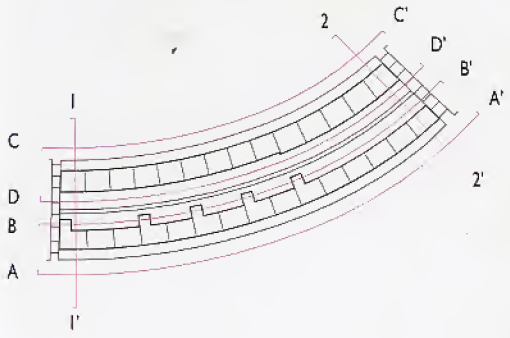
The design strategy presented to the competition was to terrace the slope. The retaining walls become habitable and the landscape molded by them becomes the exterior space extended from the interior rooms.

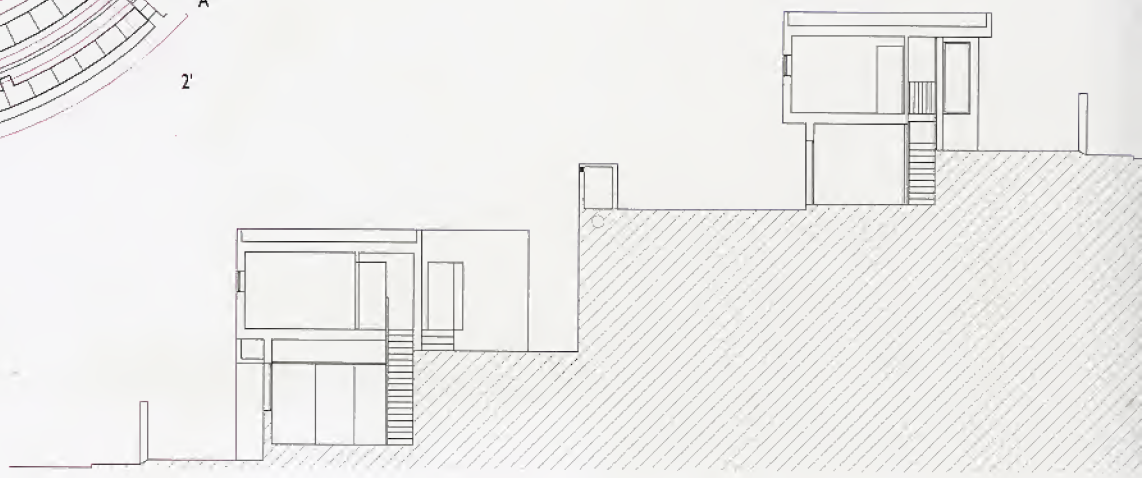
This idea brings together various aspects of the project: the conception/invention of the "place", the legal division of space, the material structure of the housing units, the conditioning of the site and the support and construction.

The building is halfway buried in strict observance of the compulsory alignment that the partial plan establishes for this lot. The wide landscape overviewed from the edge of the city finds its topographic resonance in the lineal composition of the openings as well as in their surface finishes. The distribution of the housing types searches the compositive lines that build the project's profile, enunciating a procedure more than a closed solution. The project is thus presented as a solution open to possible enlargements or modifications controlled by the unvarying lineal elements that make up the windows and the slab profiles. The imprints of what can be enlarged or modified are found in the courtyards' party walls. This is construction defined by time, by the inhabitant.

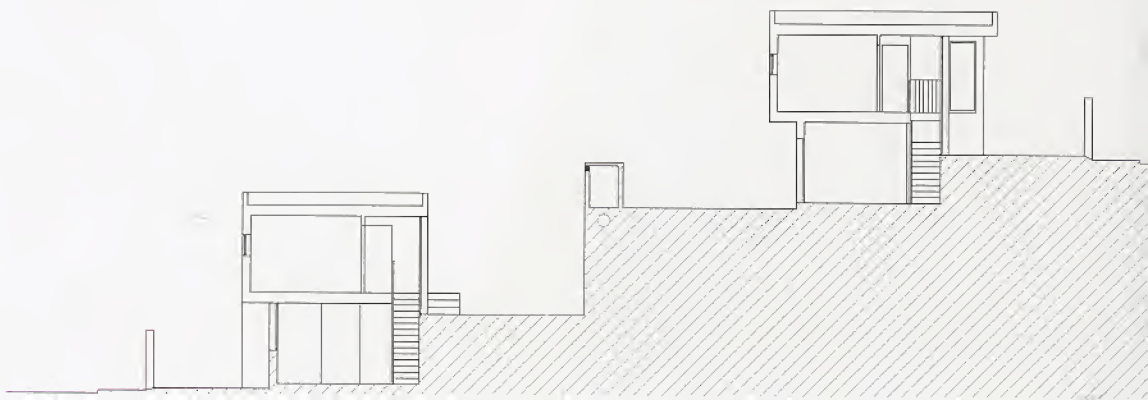


The solution that was decided upon is different in the upper street than in the lower one, and the enunciated movements compose realities as varied as the spaces they open onto.



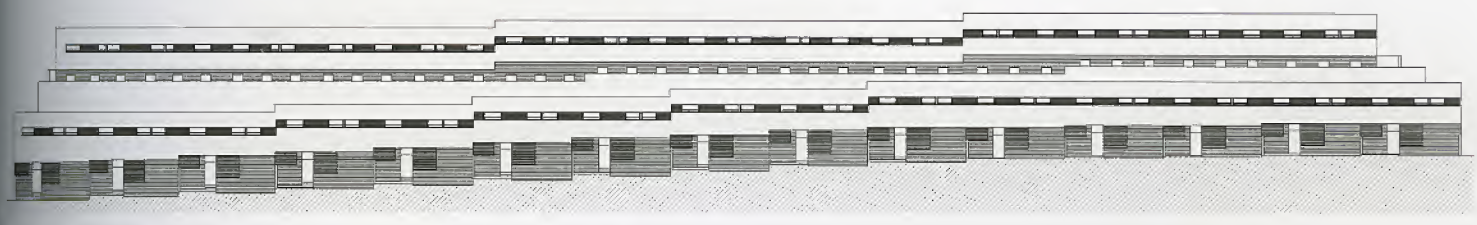


Section 1-1'



Section 2-2'

The elevation of the exterior façade is carried out from a minimum gesture attitude: slab profiles, windowsills, lintels, and parapet finishing break up following the natural topography of the site.



Façade Calle Vicente Alexaindre (A-A)

Interior elevation (B-B)

Façade Calle Antonio Machado (C-C)

Interior elevatio (A-A)

The project poses the building as an interpretation of the topography where it stands and makes the most of the extraordinary existing landscape value.

Access to the homes via Calle Antonio Machado (upper) and Calle Vicente Alexaindre (lower).

The half-buried arrangement of the buildings seeks to integrate building and land in the transversal axis of the plot, which has a considerable slope.

Jacques Herzog & Pierre de Meuron

Housing in Rue des Suisses

Paris, France

Photographs: Margherita Spiluttini

Two distinct urban situations characterize the housing project in the 14th arrondissement of Paris: on one hand, the blocks facing the Rue des Suisses and the Rue Jonquoy and on the other, the courtyard with high fire walls at the back.

Our two apartment building on Rue des Suisses and the Rue Jonquoy are incorporated in the frontage, typical of housing blocks in many Parisian arrondissements. Verticality characterizes the overall design of the relatively homogeneous facades of the adjacent buildings. As in most Parisian quarters of the 19th century, the street thus conveys a certain elegance despite the fact that the individual buildings are not particularly attractive. These two apartment buildings, with their folded frontage and folding shutters, can be adjusted individually by tenants so that, in spite of the desired homogeneity of the facades, the overall impression of their appearance varies.

The situation in the courtyard at the back was entirely different, because there were no predetermined urban specifications to use as a typological basis for the project. How should one go about planning the flats? What city-planning strategies should be pursued? What kind of buildings, what kind of architecture should be placed there?

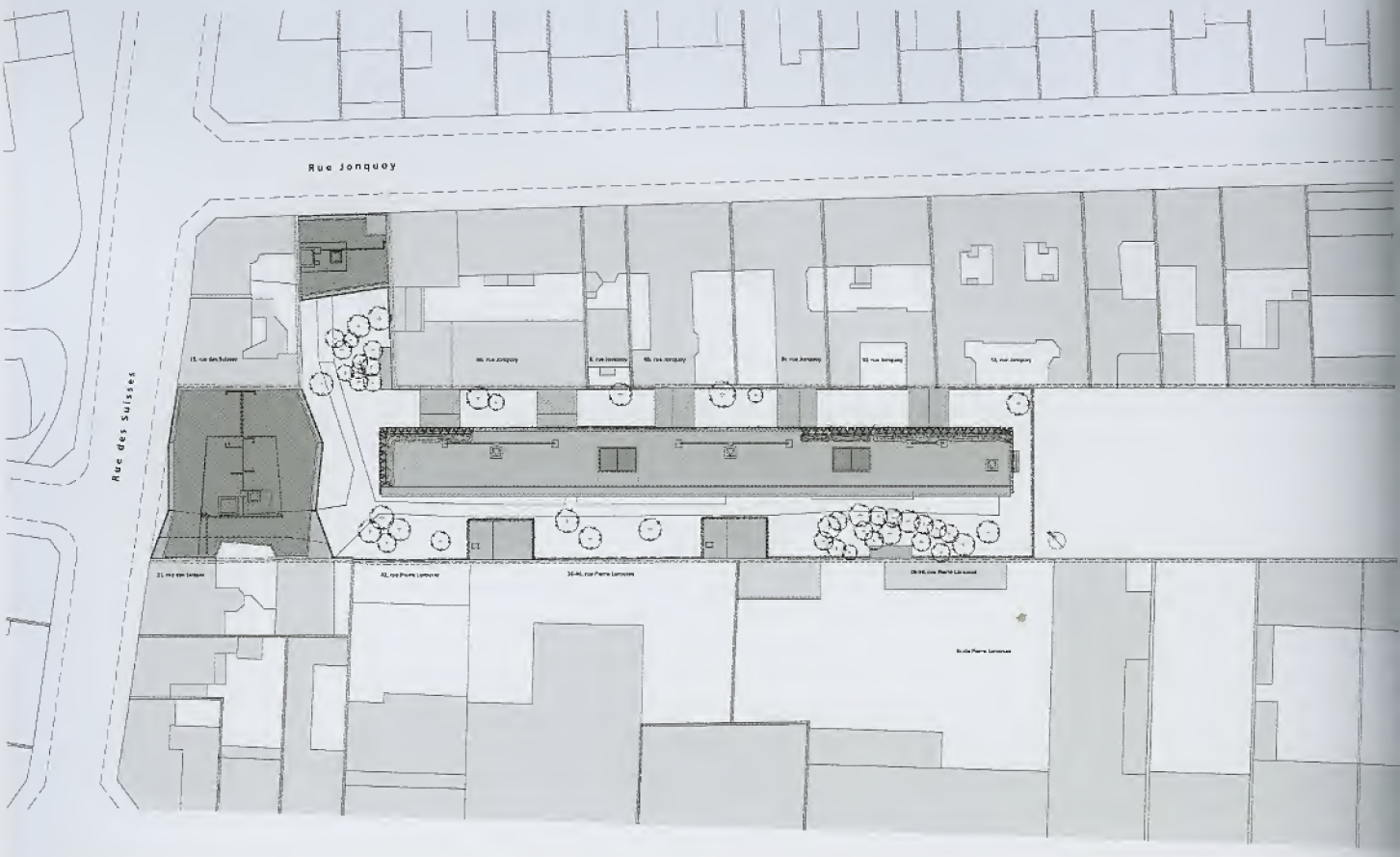
The architects tried to create a model for living that is relatively unusual in the center of Paris - one that would attract an entirely different kind of tenant than the street-front buildings. Instead of competing with the towering fire walls, a horizontal strategy was opted for; that is, the buildings were kept low to ensure that as many flats as possible would be directly and intimately connected with the grounds and the garden.

An extended, three-story structure with arcade-like balconies forms the backbone of the complex in the interior of the block. Adjoining it are cottage-like, one-story buildings for the kitchens and bathrooms. In front of the long garden wall that runs along a school playground, a few extra small, one-family homes with gabled roofs have been built. The result looks likes a seemingly random system of small units, courtyards and lanes with fragments of old and new walls covered in vegetation.

This urban model comes as a surprise when one enters the courtyard because it presents such a great contrast to the alignment of the 19th-century blocks facing the street. But on taking a closer look, one discovers a few remnants of a still older, pre-Haussmann quarter, narrow streets like the Villa Mallebay, Villa Duthy or Villa Jamot, whose small scale and proportions are reflected in these buildings.

The living quarters in the different buildings and parts of buildings vary greatly in size, layout and placement, but all are designed with a maximum of daylight and interesting views of the landscaped courtyard.

The fair-faced concrete walls have been covered with a large, grid-like net of synthetic ropes to provide a growing base of climbing plants like ivy and wild grape vines. Wooden roller blinds along the three-story facades run on molded metal tracks, giving the building a profile, like a piece of furniture.

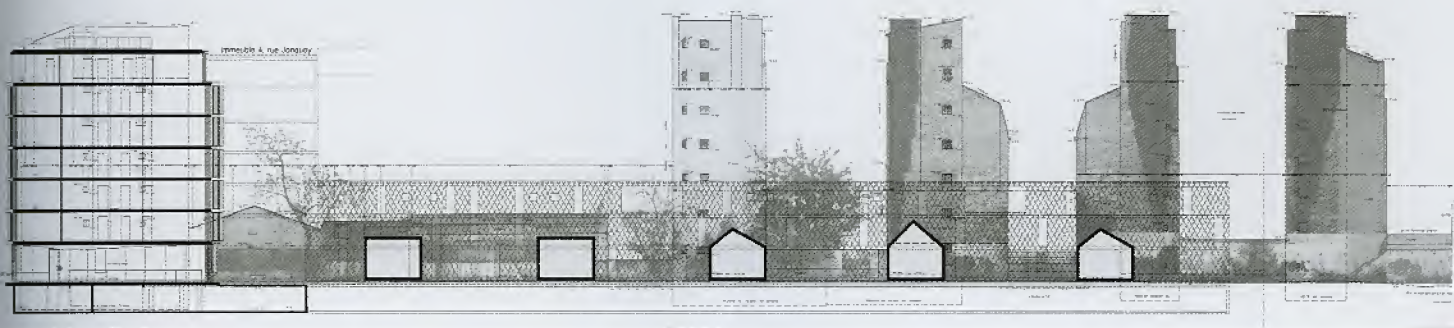


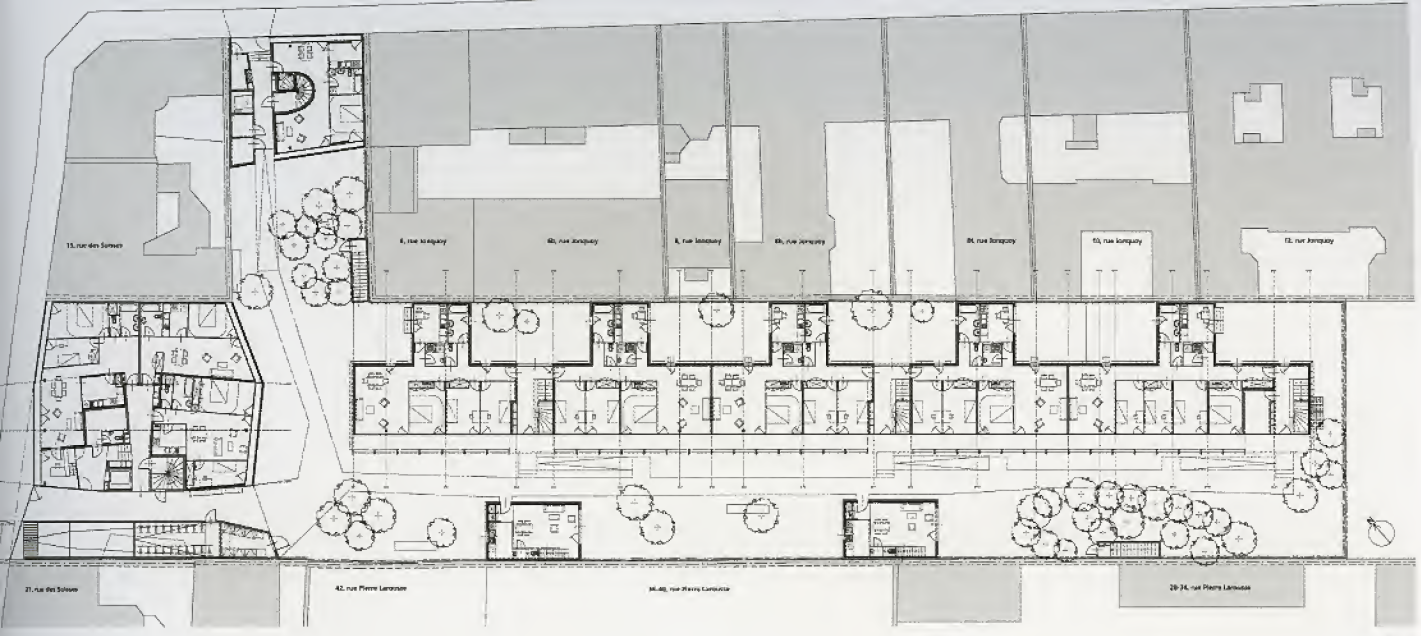
The houses that face the Rue des Suisses differ from those facing Rue Jonquoy and the patio, which faces the high party walls of the neighboring buildings.

Quite an uncommon type for the center of Paris was generated in the interior courtyard to attract diverse inhabitants. The cottages in the backyard are another element that adds to the amount of different types of the project.

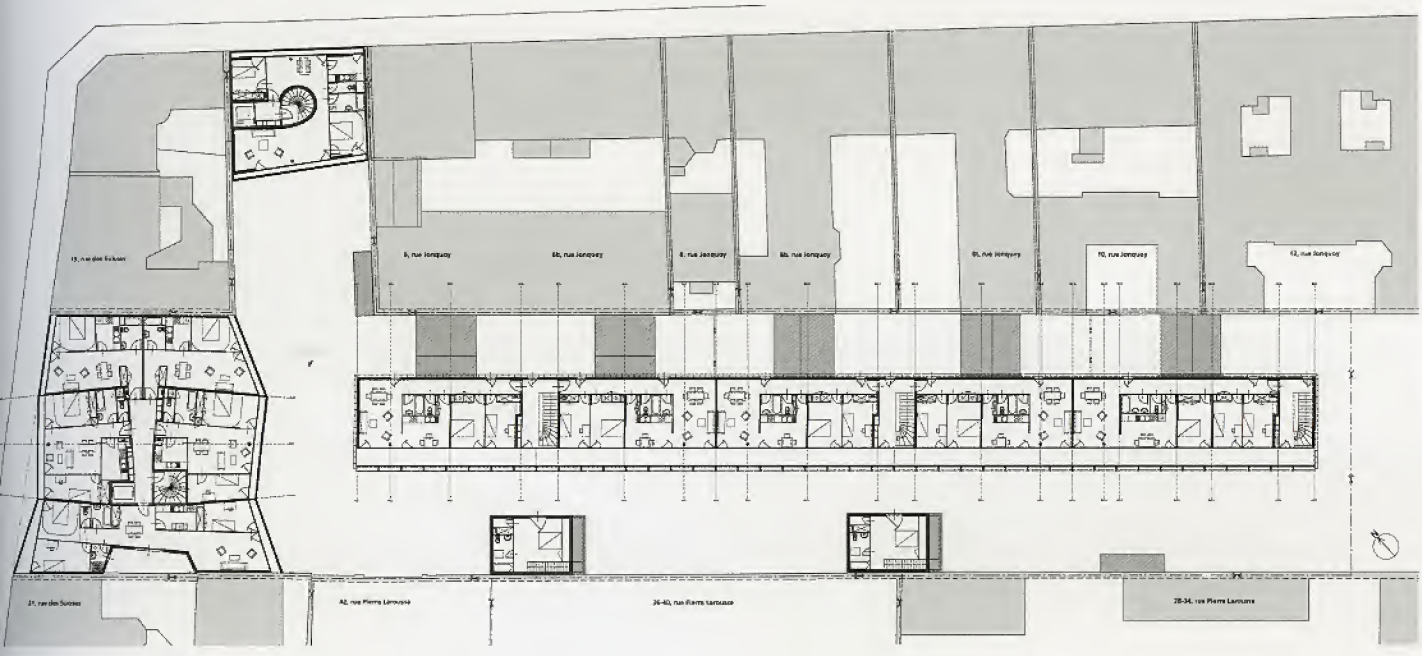
Southwest elevation facing the patio

Elevation to the Rue Jonquoi

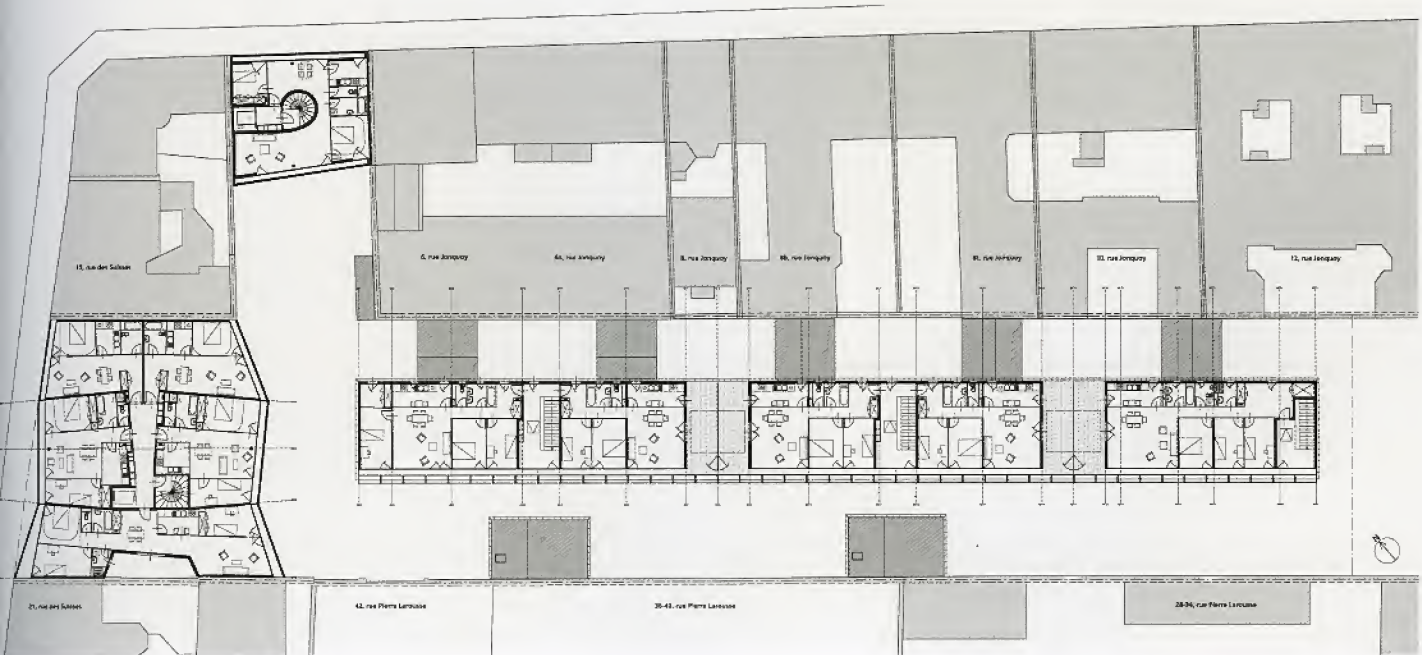




Ground floor

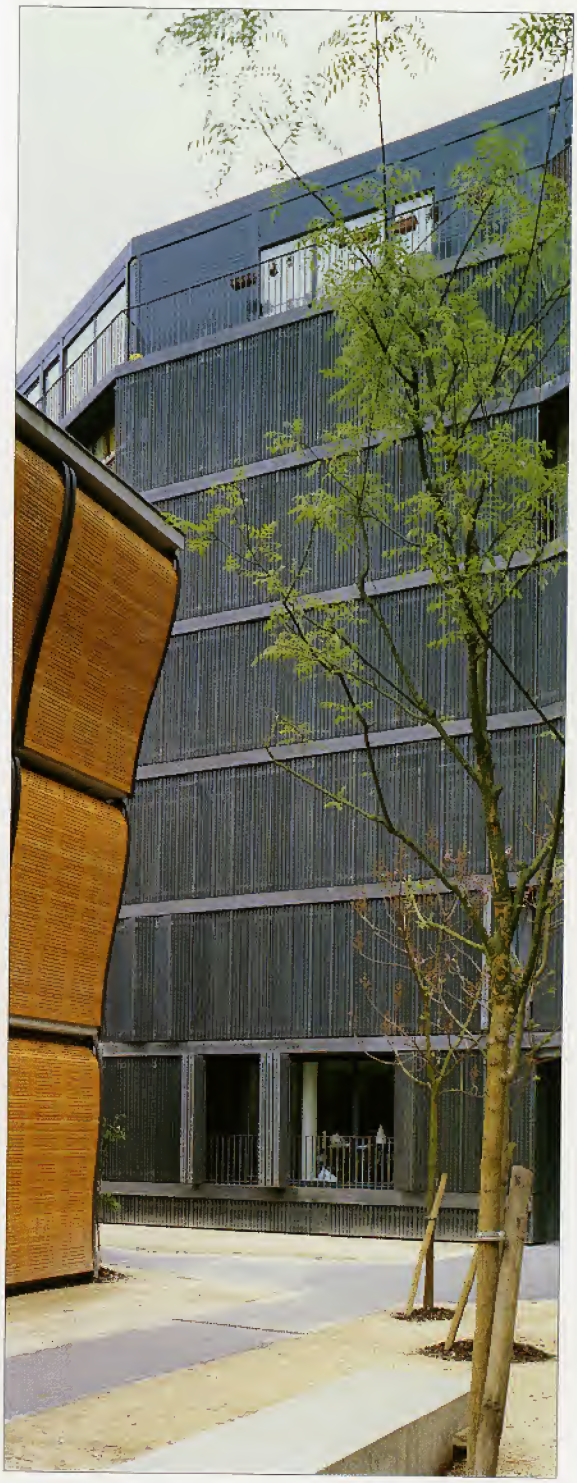


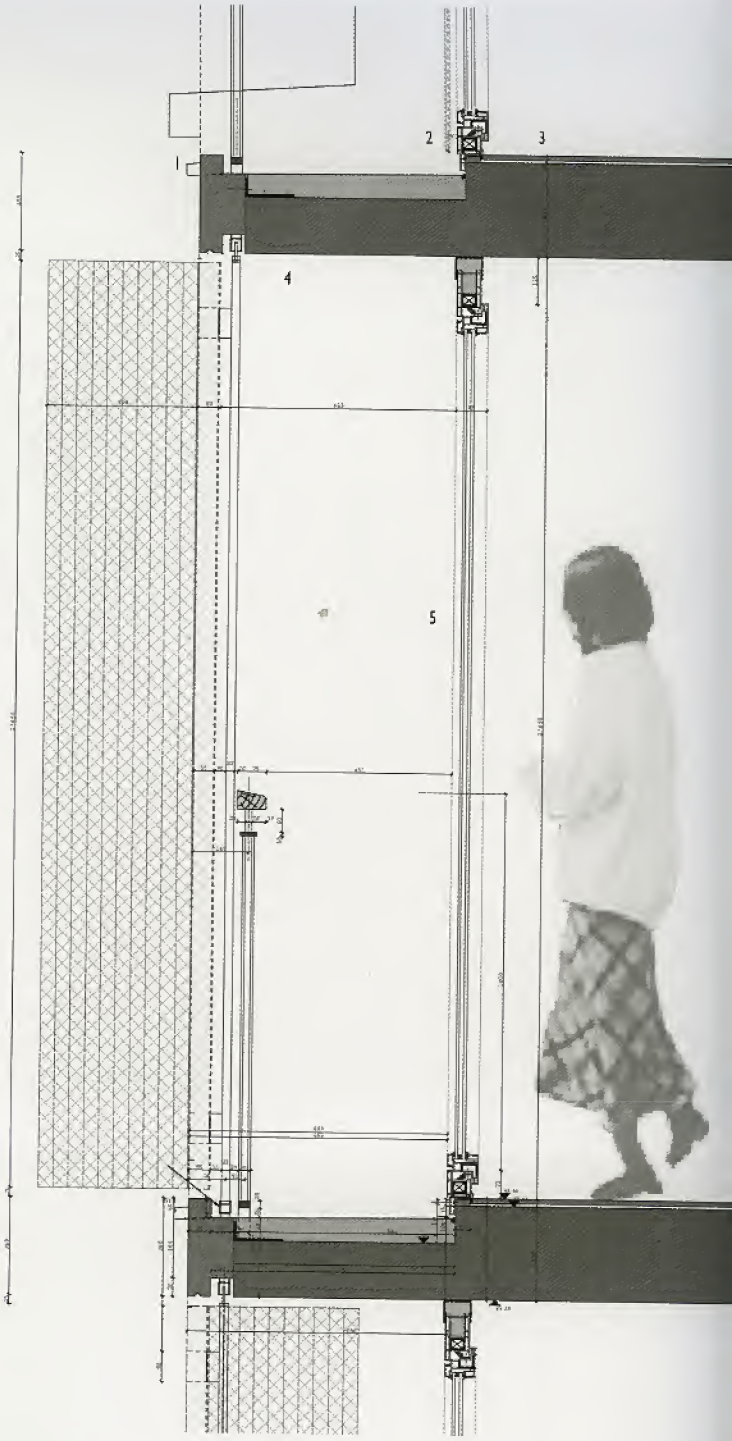
First floor



Second floor

1. Prefabricated concrete element dyed black.
2. Sixth floor: Drawn back elevation with aluminum louver.
3. Parquet floor.
4. Underside of slab dyed Technicoat finishing
5. Pivoted window, PVC joinery. Aligned, fixed and pivoted sash.





The wooden shutters, regulated by the inhabitants, provide an ever-changing image to an elevation that resembles a massive piece of furniture. The elevation's finishing is conformed by the large floor-to-ceiling metallic and wooden shutters.

1. Ceiling: Wooden lining.
2. Moabi joinery.
3. Aluminum louver rail.
4. Oregon pinewood louver.
5. Terrace floor: Wooden plates, e=22 mm.
6. Perforated PVC screen.

Feilden Clegg Bradley Architects

Beaufort House, Lillie Road

London, United Kingdom

Photographs courtesy of the architect

As a model of modern affordable housing, this project epitomizes the government's housing agenda - high density with accommodation split between shared ownership and rental provision, with a range of unit sizes from one bedroom flats to large family houses.

Beaufort House demonstrates innovation in the construction methods: a prefabricated steel load-bearing system incorporating large-scale cold-rolled panels, large scale hot-rolled elements, and three-dimensional modular construction. It is the first social housing project in the UK to incorporate these three off-site fabrication approaches in one scheme.

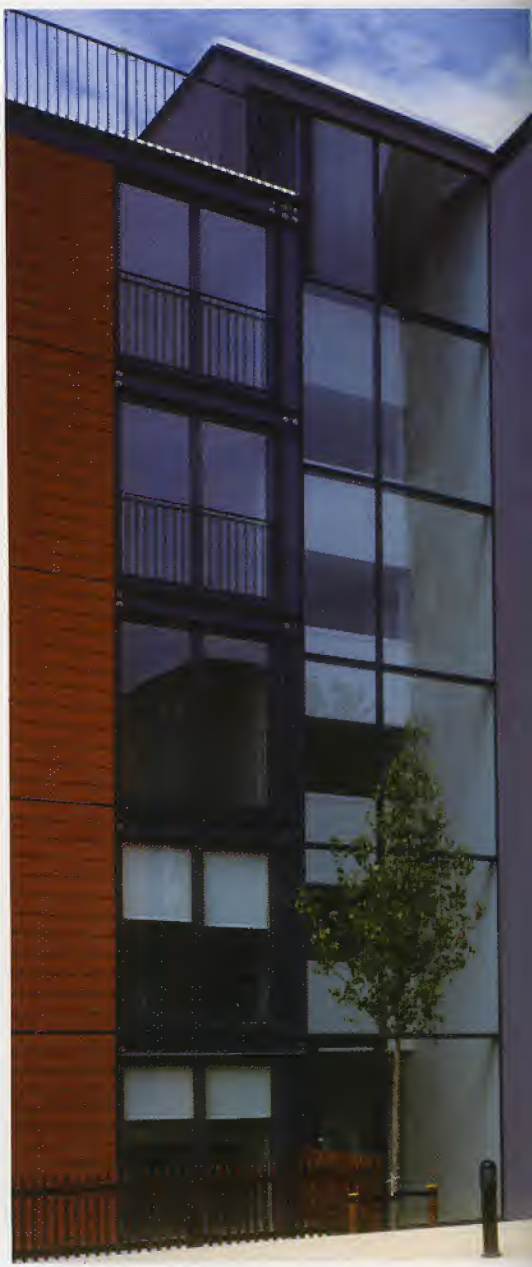
The new scheme comprises three blocks arranged around a courtyard serving both the new development and the adjacent 1912 Peabody estate. This landscaped courtyard contains an all-weather sports pitch and, together with the new Tenants' Meeting room, provides amenity space for all residents, protected from the busy road.

The fabric of the building gives a high thermal and acoustic performance which will exceed current building regulations. The aim is to surpass current standards for energy efficiency and provide affordable warmth for the tenants. This is achieved by a combination of a thermally efficient envelope, a careful selection of materials, the orientation of the units to maximize daylighting and the use of green roof systems.

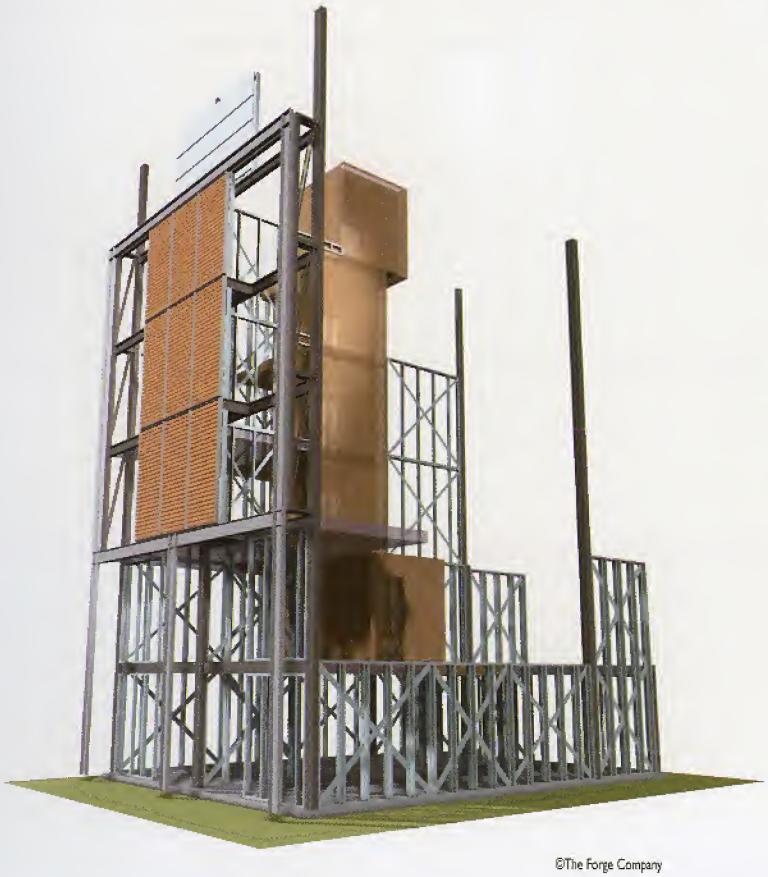
The scheme consists of 65 housing units on a restricted urban site, which was formerly occupied by a Victorian School that was demolished in 1998. It is located within an active area of residential, retail and commercial uses with a variety of properties, ranging from Georgian town houses to low-rise school buildings.

The design solution consists of three blocks forming edges to a protected enclosure on the north, south and east boundaries. The blocks are arranged around a raised landscaped courtyard that forms a focus for the site and sits above a semi-underground parking lot.

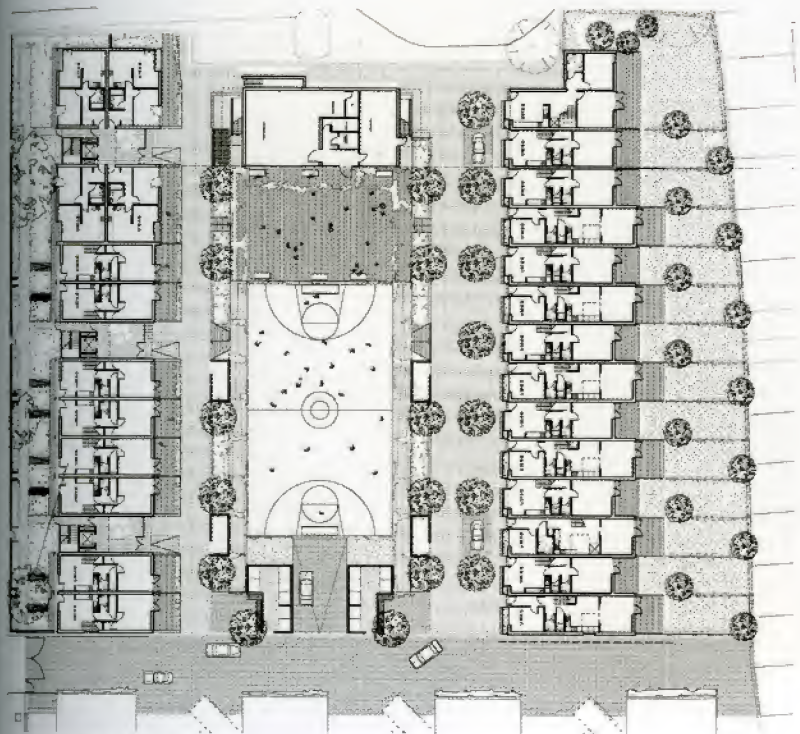
The three blocks are treated individually according to their locations on the site, type of accommodation and relationship to surrounding buildings and boundaries. The way in which the accommodation is distributed, with the majority of units contained in a six story block, permits the remainder of the site to be occupied by smaller-scale blocks and landscaping, thus maximizing the amenity space and giving the impression of lower density.

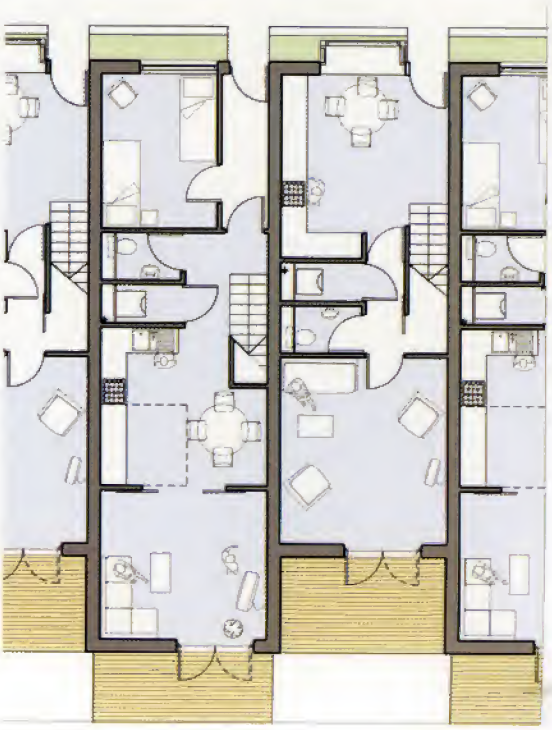


All apartments have private balconies, and the ground floor houses have private backyards evoking those of the neighbor's. The structural system allows large openings for windows and balconies. Except for the foundations, the building system is dry construction.



The blocks are arranged around an elevated patio, above the semiburied garage, which becomes the focal point of the site. The site has a surface of 0.53 hectares. The project develops 65 housing units with a total ground surface of 5785 m².



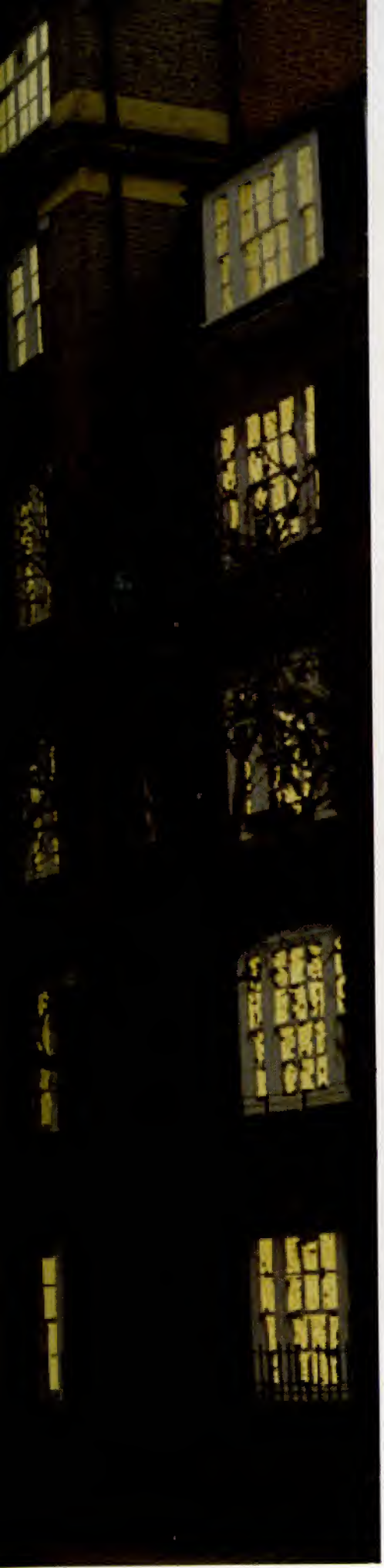


The loggias of the six-story building are glazed towards the south and ventilated naturally during the night to alleviate the effects of high summer temperatures.

The exterior elevation is composed of full-height glazing, terra cotta blocks with continuous head joint and grooved terra cotta rain screen.

PARAGON

structure that will proportion a greater thermal and acoustic insulation than the one required by building regulations.



José Morales Sánchez & Juan González Mariscal

Housing in San Jerónimo

Seville, Spain

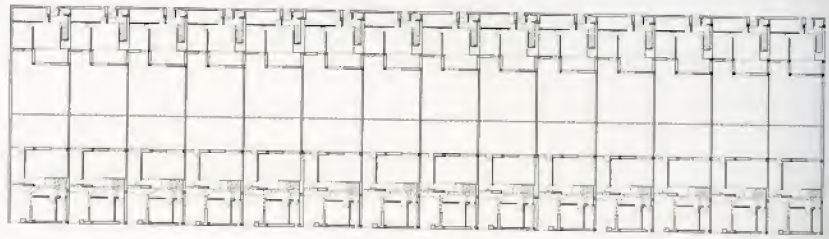
Photographs: Fernando Alda

Two plots located in a peripheral area of Seville configure the lot. This area was originally a suburb linked to the city, absorbed by it during the last decade. The Tamarguillo river, a tributary of the Guadalquivir, delimits the plots where both housing blocks stand: a four-story block and a single-family row houses block.

The four story block project aims at these main goals: on the one hand, to keep the ground floor of the building open, avoiding building the whole block's perimeter around a central patio (as proposed by town regulations) and linking this one to the surrounding streets taking into account their different heights. On the other hand, the goal set forward was to open the building towards the fields, given the fact that this is the last block of urban land in Seville. This is achieved by opening the transversal sides of the block depriving the patio of its central configuration and providing good exterior views from the first floor. The configuration of the plan contributes to the idea of an open block avoiding any special solutions for the corner units.

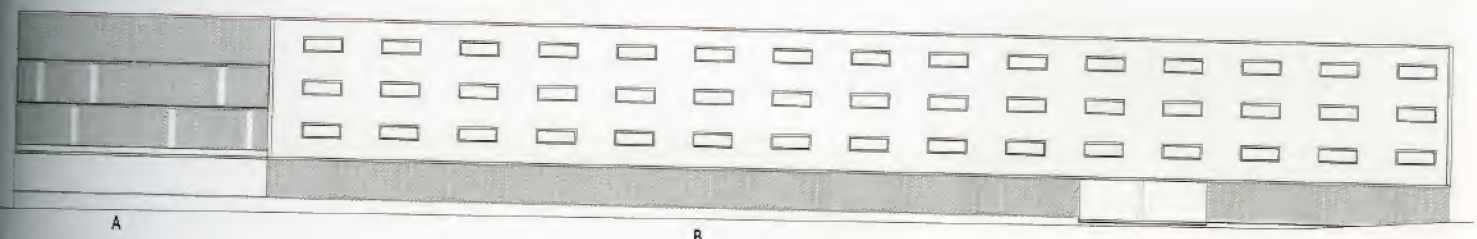
The surface of these houses is minimal due to the requirements of social housing. The goal pursued in these apartments was to achieve some extra space to compensate for their limited surface area. A curtain between the interior and the exterior of the dwelling encloses the exterior space where the rooms open. This space can hold all the objects that allow the inhabitants to manifest themselves towards the exterior. The technical solution for the curtain gains 30 centimeters more than the space provided by regulations, creating an extra room measuring 12 m^2.

In the single-family houses (these enjoy a greater surface area) the interior space is diagonalized in search of wider perspectives from the main rooms (living and dining room). These houses contain a sort of "compass" which functions as an interior-exterior space. Both the main room and the kitchen open to this space. The joinery of the first floor is designed as a unique piece, which works as protection, although its main objective is to expose the dwelling when this sliding mechanism is moved.



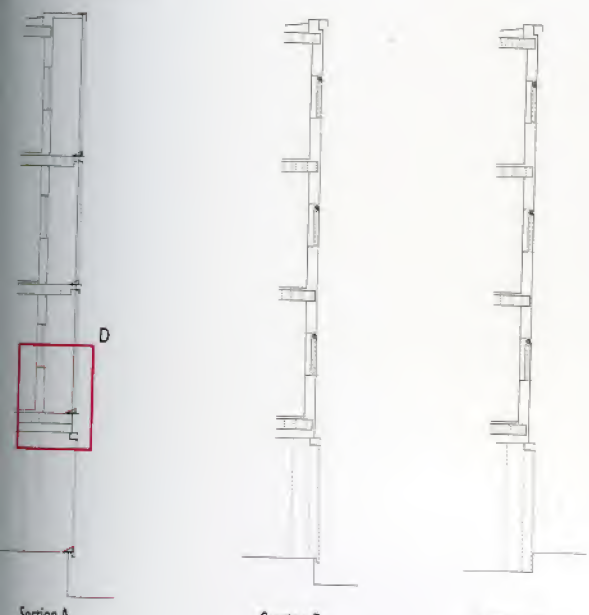
The plot is composed of two blocks open to the fields. There are two different housing types: single family row houses and flats in four-story building. The traditional closed patio block is avoided with this arrangement.

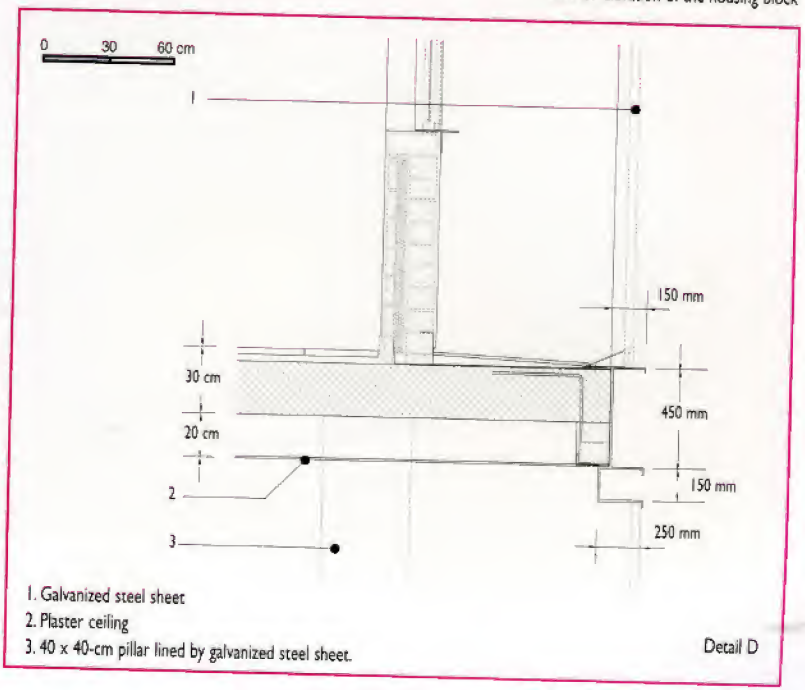
The four-story block is situated next to a road with heavy traffic while the single-family houses face a newly developed square.



0 5 10 m

Exterior elevation of the housing block



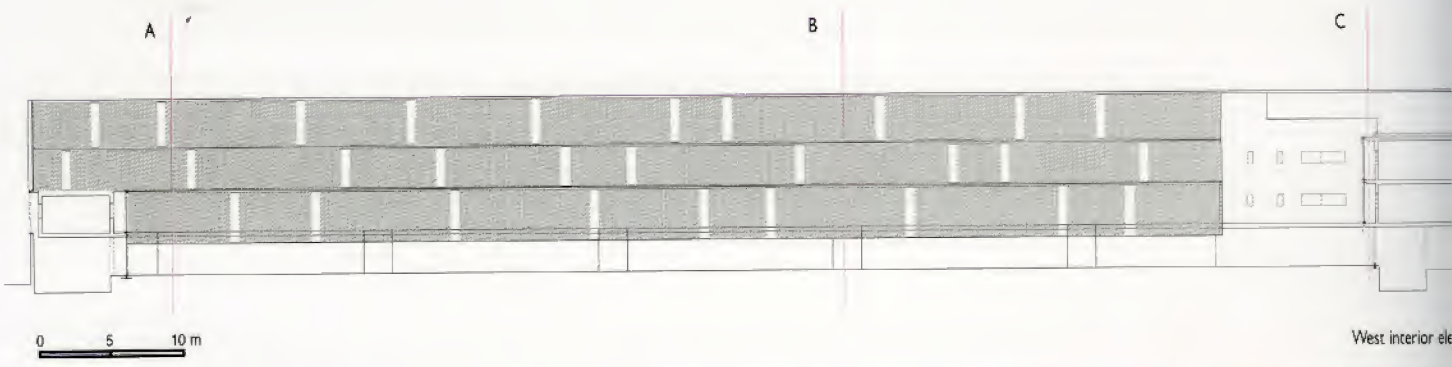


1. Galvanized steel sheet
2. Plaster ceiling
3. 40 x 40-cm pillar lined by galvanized steel sheet.

Detail D

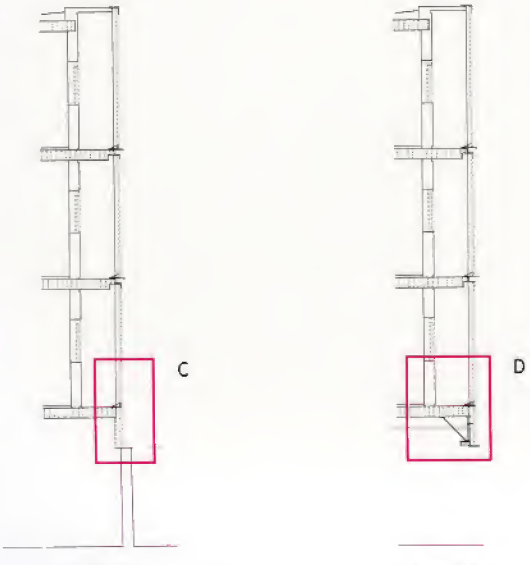
A break in the type used along the whole block defines the floor plan, taking advantage of the dislocation to avoid building interior corners.

The bedrooms flow into a space enclosed by a "curtain" between the interior and the exterior of the dwe
The technical solution for this element gains 30 more centimeters above the space provided by regulatio

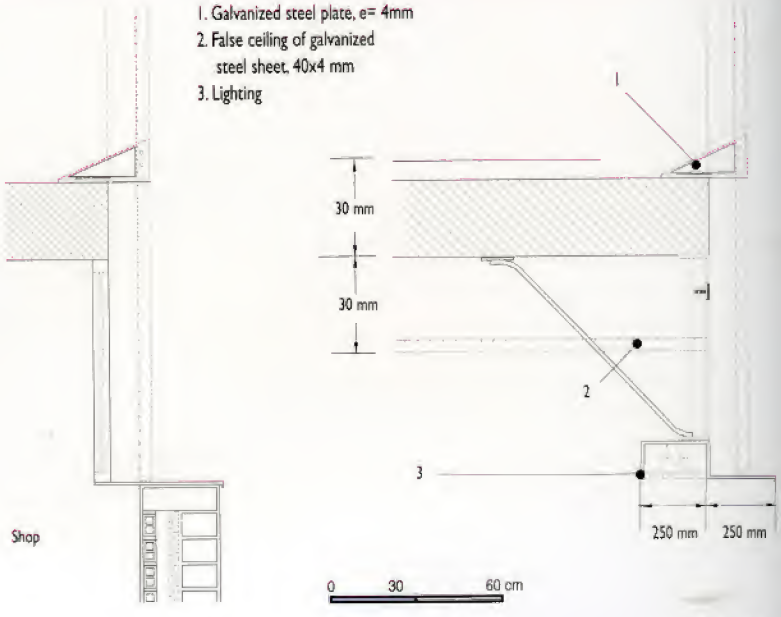


West interior ele

* The building has been solved with a mixed structure liberating the parapets form bearing any weight as much as possible.



1. Galvanized steel plate, e= 4mm
2. False ceiling of galvanized steel sheet, 40x4 mm
3. Lighting



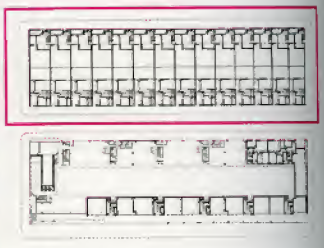
Detail C

Detalle D

Section A

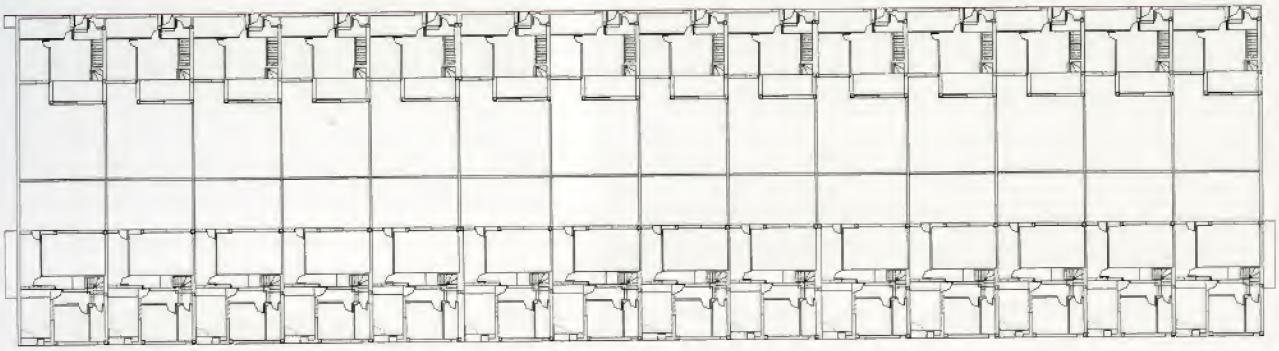
Section B

All elements have been designed to avoid suffering wear and tear from extensive use.

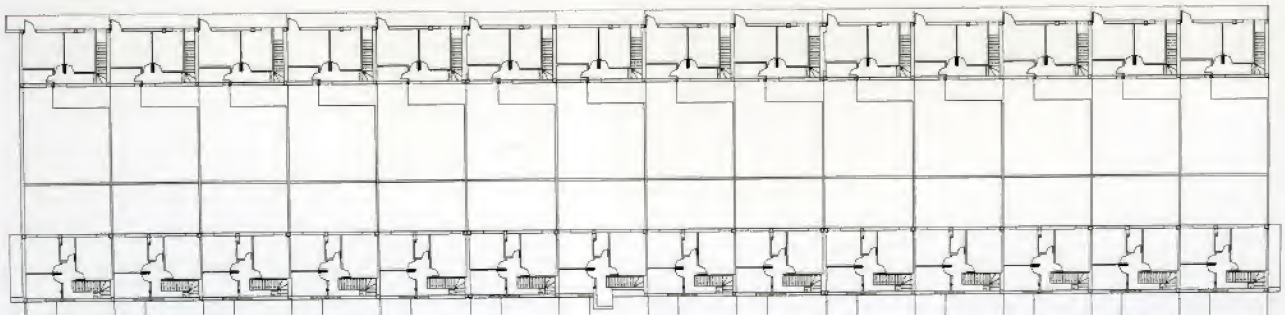


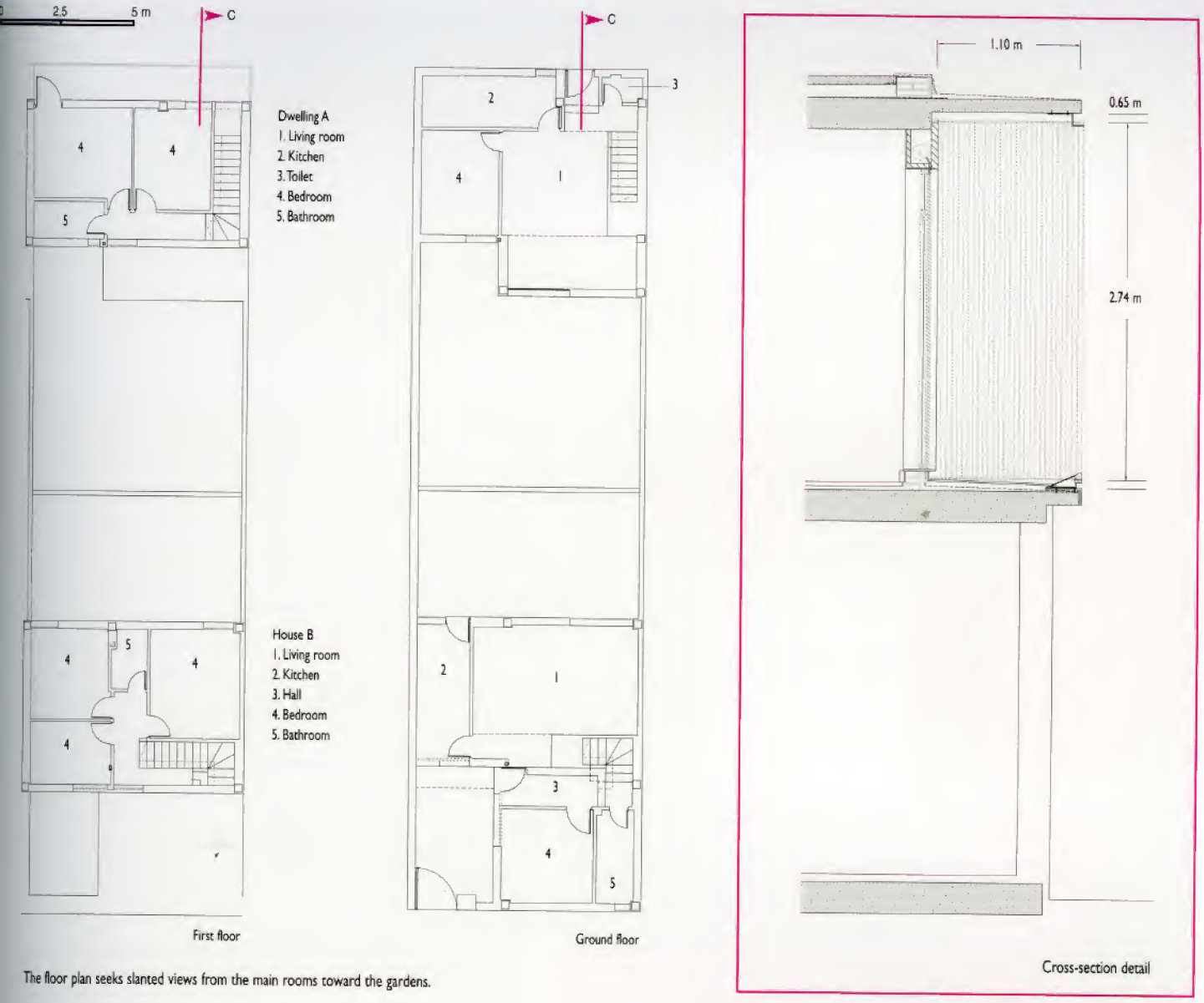
Single-family dwellings

0 5 10m

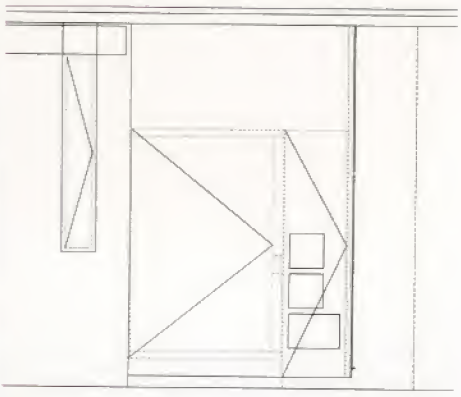


Ground Floor





The floor plan seeks slanted views from the main rooms toward the gardens.



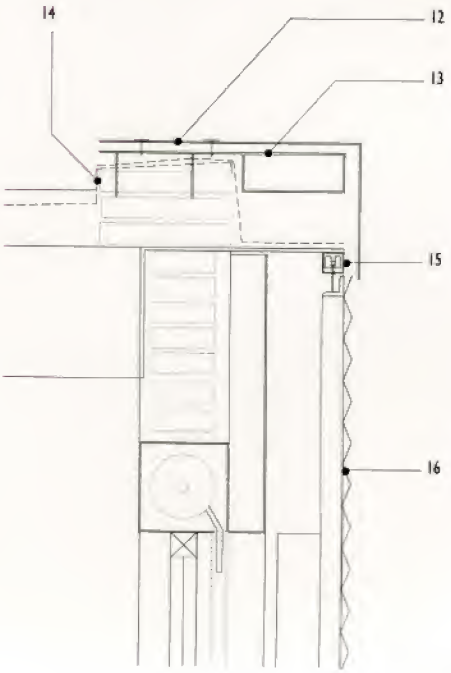
All materials that give the building its appearance and color have a very low cost maintenance.

Detail 1:

1. Folded galvanized steel sheet, e=4 mm
2. Aluminum sheet polished in its original color, e=1 mm
3. Aluminum blind polished in its original color
4. Aluminum joinery Mm9/Vm10
5. Glass, e=4 mm
6. Aluminum sheet polished in its original color, e=1 mm
7. Aluminum bar, d=20 mm
8. Polystyrene thermal insulation, e= 4 cm
9. Brick wall
10. Air cavity
11. Steel hook

Detail 2:

12. Galvanised steel corner sheet.
13. Sheet supporting profile.
14. Waterproof felt underhand.
15. Sliding door horizontal, 40 x 40 mm.
16. Deployee galvanised steel mesh.



Diezinger & Kramer

Social Housing in Haunwöhr

Ingolstadt, Germany

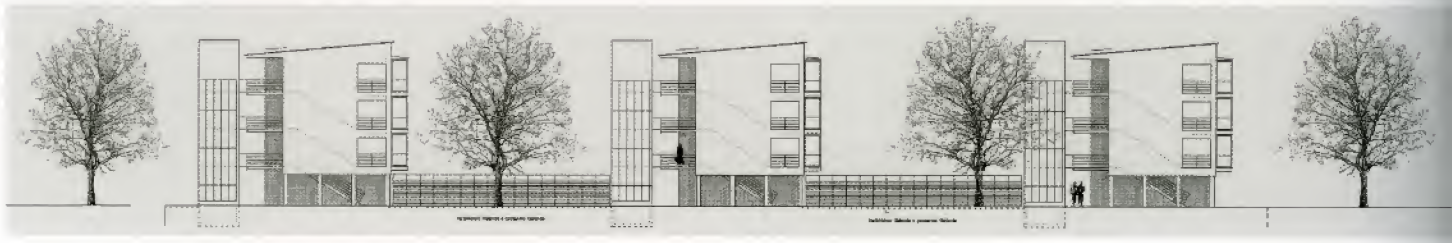
Photographs: Stefan Müller Naumann / ARTUR

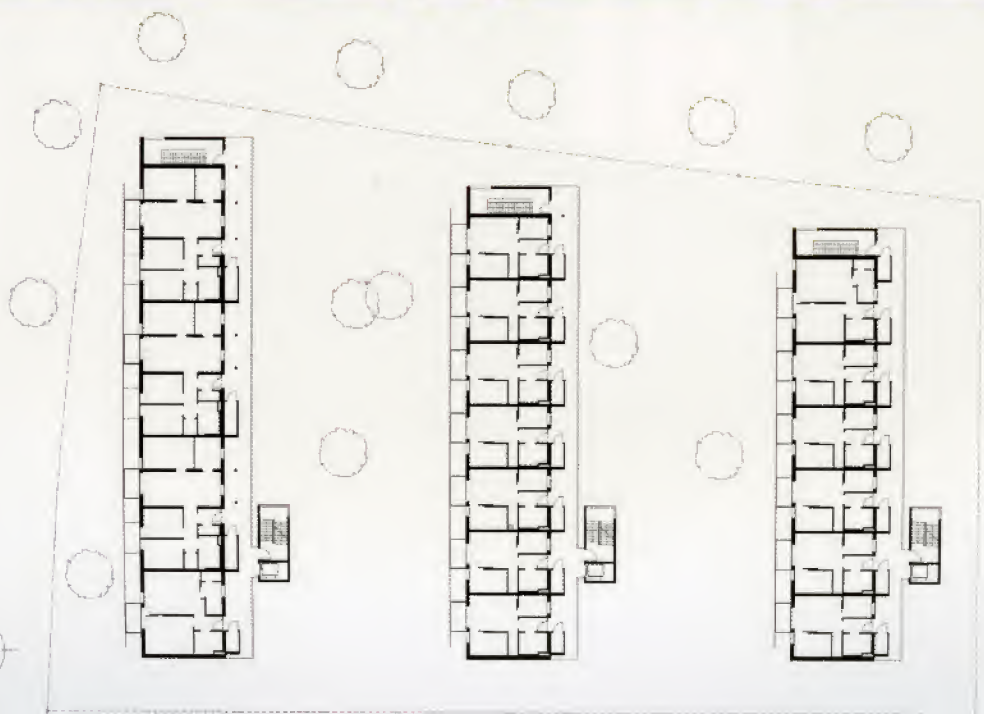
This housing complex is located in the Haunwörh district of Ingolstadt, to the south of the Danube's reservoir. The site is surrounded on three of its sides by well-communicated roads to the city center. The complex is divided into three buildings with floor plans of different sizes. The parallel disposition of the buildings creates large interior courtyards to be used by all the inhabitants.

The dwellings located to the north are accessed from wide enclosed corridors, while on the south side the building has spacious balconies or loggias which can be used all year long, especially by those elderly residents who may have reduced mobility. All main rooms are south-facing.

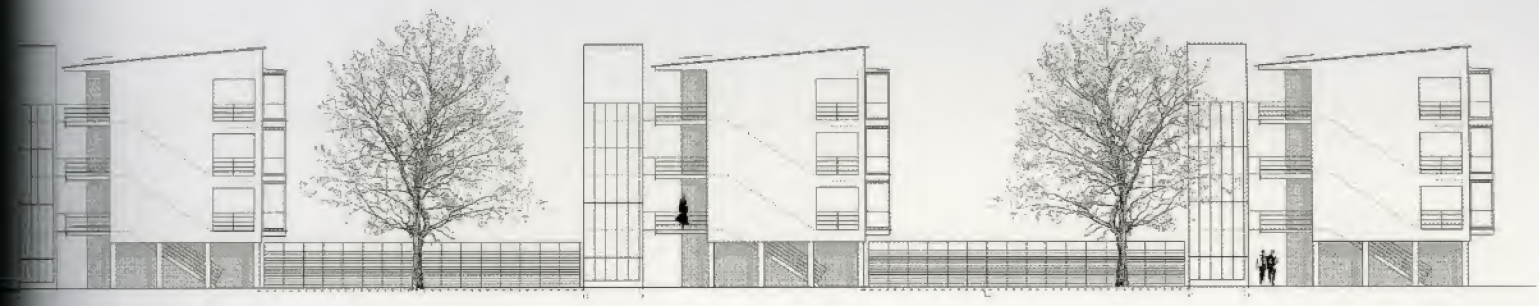
The 60 apartments have been built without any architectural barriers. Community areas, rubbish storage rooms, bicycle storage, and 30 parking spaces are located on the ground floor.

The loggias can be opened completely in the summer, thereby becoming balconies; they are built entirely in steel with sliding glass panels.



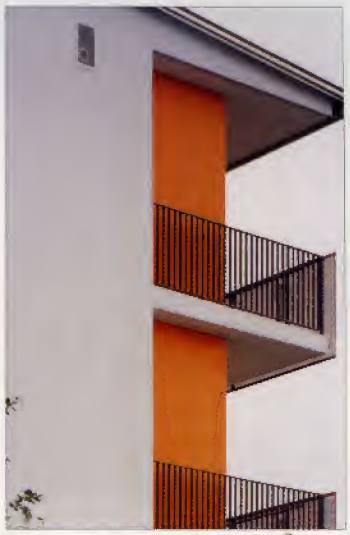


The complex is organized into three buildings, four floors each, with intermediate community green areas.
The apartments are planned for senior citizens and numerous families.



Side elevations

Main elevation and cross-section



The project includes numerous exterior-facing spaces, which is especially useful for those elderly occupants that might have limited mobility. Due to climatic circumstances the main rooms face south. The loggias can be opened completely during the summer to become balconies.

Color and light increase the visual comfort of the project, adding to that of the gardened areas that they open onto.

Valérie Vaudou & Laurence Allégret

Housing Pli, Paris 19e

Paris, France

Photographs: Hervé Abbadie

La Villette, located in the northeast of Paris, once hosted a great number of slaughterhouses. The area has since been totally transformed due to the construction of an urban park and a museum. The buildings used for the slaughtering process were progressively demolished and replaced by housing and public facilities for the neighborhood. One of these interventions is located between the Saint Martin canal and the Rue de Thionville, shaping a double building with certain unusual aspects for a social housing development. The big openings on the front and the aluminum façades give the eight story building on the canal's shore an image that looks more like an office building than a housing complex. This ambiguous identification is due to the fact that this type of building rarely has large openings and they usually cannot enjoy too much natural light. On top of that, the gray Alucobond panel skin has nothing to do with glass, tile, and concrete, or the rest of the mineral finishing of the architecture found between La Rotonde de Ledoux and La Villette. 42 Quai de la Marne injects some character and restraint into this architectural maelstrom. According to the architects' wishes, the building should subtly adapt to the local vocabulary: the aluminum wrapping recalls the metallic exterior skin of a neighboring thermal power plant and the powerful structure of Eiffel's railway bridge crossing the canal. The division of the higher floors through dark gray lacquered aluminum sections underlines a certain refinement of the metallic skin.

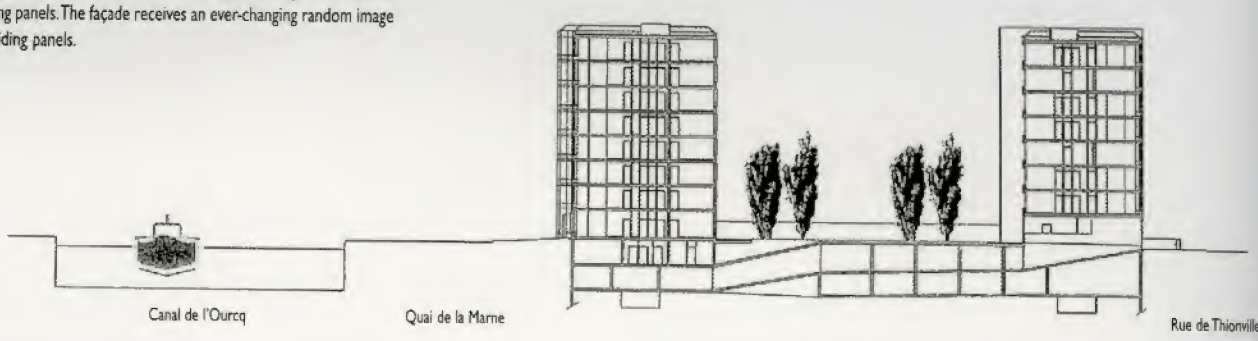
The same skin covers the elevation towards the interior courtyard. While the large openings facing the canal have a constant image, open to the sky and the urban landscape, the sliding panels of the rooms facing the courtyard provide this façade with a random image. Toward the Rue de Thionville, the five-bedroom duplex has a hybrid façade. Unfortunately the fourth elevation does not get the same finishing since a great amount of the budget was destined to the deposit on the canal's shore.

The architects have not centered the budget on the exterior only; the dwellings are spacious, comfortable, and abundant in light and good views. The bedrooms get direct and indirect natural light, and the daytime areas have big openings and introduce a certain modulation of space.

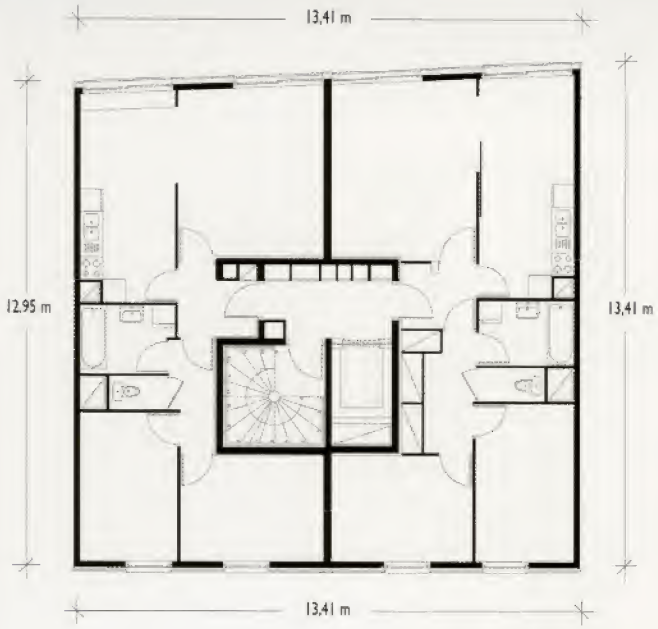
This architecture demonstrates how the combination of compromised architects and clients can, for everybody's benefit and particularly the users', open options where they seemed closed.

The narrow lot, measuring 13 by 68 meters, inspired the arrangement of two blocks and a spacious central garden courtyard. The double block visually distances itself from the traditional social housing image via large openings facing the canal.

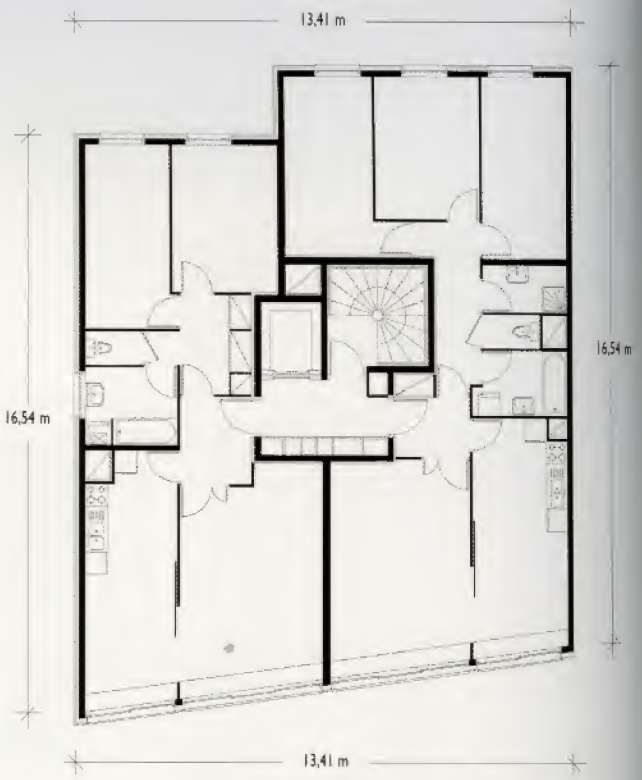
The elevation facing Rue de Thionville is a combination of large windows and Alucobond sliding panels. The façade receives an ever-changing random image thanks to the sliding panels.



The height of the parapet places the windows at the eye level of a sitting person and contributes to the quality of the home's lighting. The daytime area can be transformed through the movement of the sliding partition between the kitchen and the living room.



Standard floor plan for the building on Rue de Thionville



Standard floor plan of the building on Quai de la Marne

José Ramón Sierra Delgado

Housing in Polígono Aeropuerto

Seville, Spain

Photographs: Fernando Alda

The project deals with an irregular plot, a slightly trapezoidal shape with a rounded corner at the intersection between two important roads of this peripheral area of the city. Therefore the new building constitutes the physical façade of the city facing northward toward the countryside and the airport.

Regulations stipulate a continuous building, eight stories high on three of its sides and four stories high on its fourth side, the last one without shopping space. The buildings are situated on the perimeter of the lot enclosing a big patio in its interior.

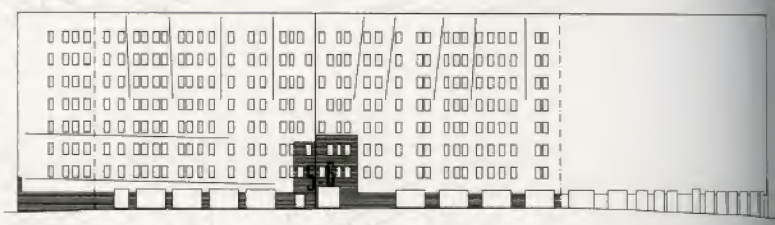
The project had to contain a garage, independent in both its use and access, an indefinite number of shops, and 158 social dwellings, approximately 50 percent of which must have three bedrooms and the rest either two or four. The construction must suit the lowest building costs possible for a housing project intended for the resettlement of marginalized social groups which have already been rejected by the neighbors. The building had to be carried out without any information poster to prevent, as in previous experiences, the neighbors from objecting to the construction of the building, which could have paralyzed the work.

The project proposes the creation of successive spaces that will foster relation and communication between its inhabitants without interfering in the required privacy for each home. It is a search for a formula that maintains and strengthens the community items of a *corral* (a typical construction in the south of Spain, which encompasses many houses units arranged around a patio) but without their lack of privacy and minimum surfaces. Following this logic, every floor's landing is configured as a wide hall where neighbors can sit and chat. Perhaps some flowerpots will hang on the rails that open this space to the patio, where kids play protected from the street.

Elevation entrances 1/2, four story building.

Elevation entrances 7/8.

Elevation entrance 3/4.

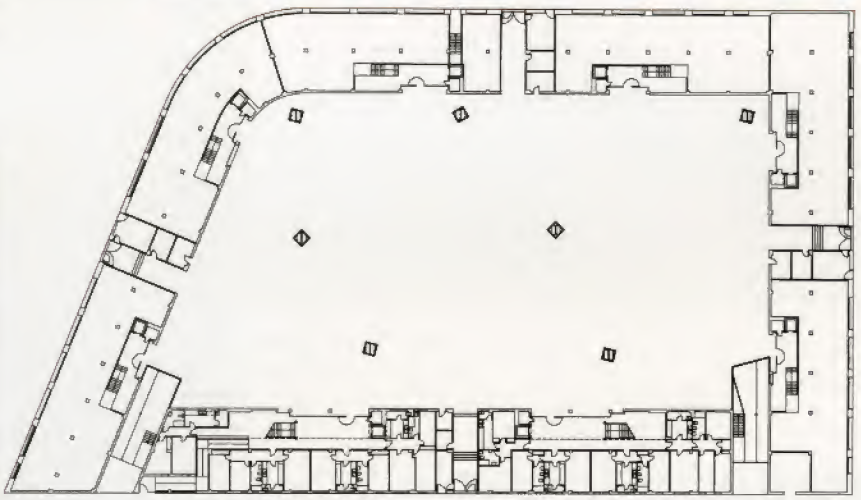


Elevation entrances 5/6.

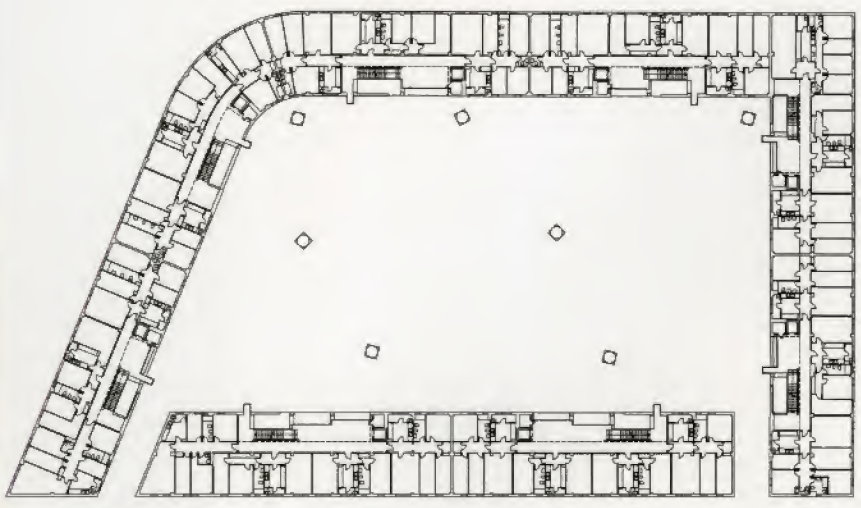
0 10 20 40

The building is built as a continuous screen facing the two main roads. The shops are situated independently of the exterior façades of the seven story buildings.

The patio is accessed from the streets via four openings, one on each side, that are closed with gates and an electronic security system. The buildings seem to fold around themselves to protect the patio, transforming it into a safe area for the neighbors to enjoy.

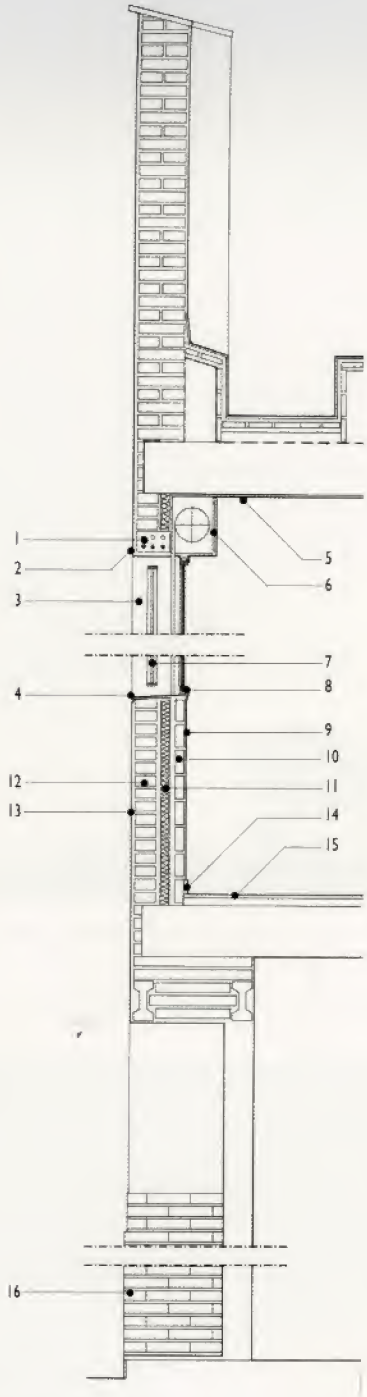


Ground floor



0 10 20 40

Standard floor plan

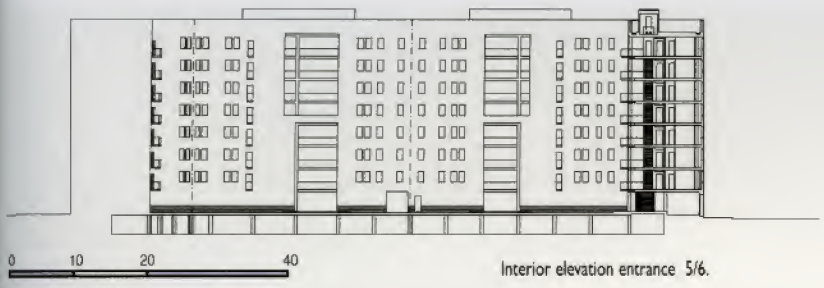


Window lintel:
1. Reinforced header vertical bricks
2. Exterior side rendering coat
3. Interior side rendering coat
4. Windowsill configured by 14x28cm ceramic tile aligned with parapet
5. Three coat plaster and plaster dressing
6. Blinds box with interior register
7. Galvanized steel profile joinery
8. Grating (first two floors)

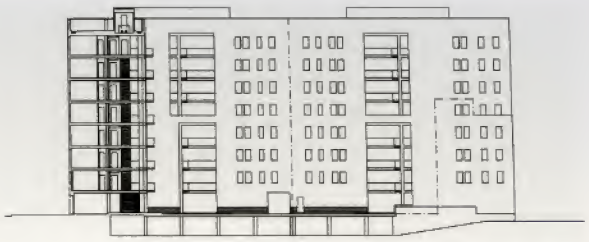
Enclosure:
9. Plaster finish and reinforcement
10. Air brick partition wall, e=4cm
11. Projected polyurethane, e=3cm
12. Airbrick zither, e=9cm
13. Rendering coat

Floor:
14. White terrazzo stripe baseboard, e=7cm
15. White terrazzo, 33x33cm

Plinth:
16. Vitreous stretcher and header air bricks



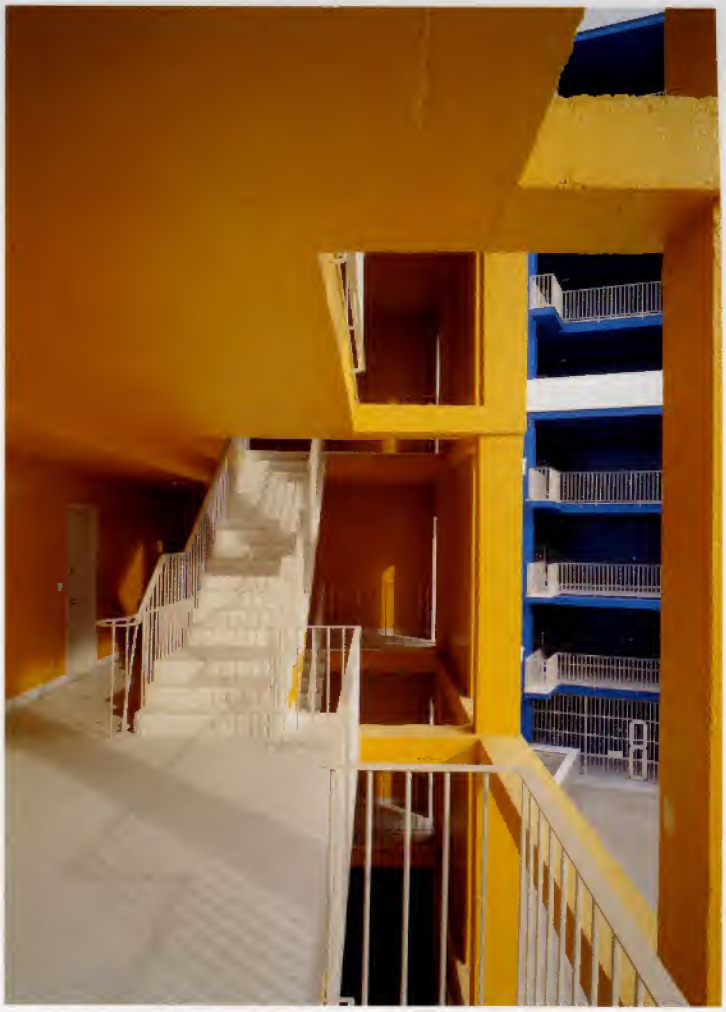
Interior elevation entrance 5/6.



Interior elevation entrance 3-4.

The eight portals are accessed from the patio, compulsory transitional space to and from the dwellings.

The patio's lamp/planters allow the ventilation of the underground garage providing it with natural light during the day and illuminating the patio at night.



An obligatory functional structure has been improved here: the landings on each level have been configured as wide community halls that foster relationships among neighbors.

Grabow und Hofmann

Social Housing in Nüremberg

Nüremberg, Germany

Photographs: Gerhard Hagen / ARTUR

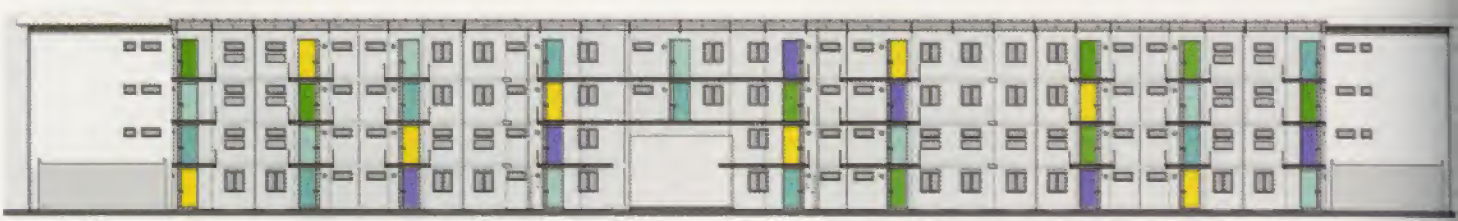
The housing estate was built on the grounds of a former slaughter house in Nuremberg, in the context of the project "Offensive Zukunft Bayern - Neue Siedlungsmodelle" (Approach for the Future Bavaria - New Designs for Urban Areas).

A strict structure of the development scheme was the guideline for the design. Differentiated designs were created, thereby relating the social intentions of the estate to architecture.

Because every apartment has its own entrance, either directly from the public space or from an access balcony (whose horizontal lines determine the facade, in line with the urban concept) communicative and outdoor living is encouraged.

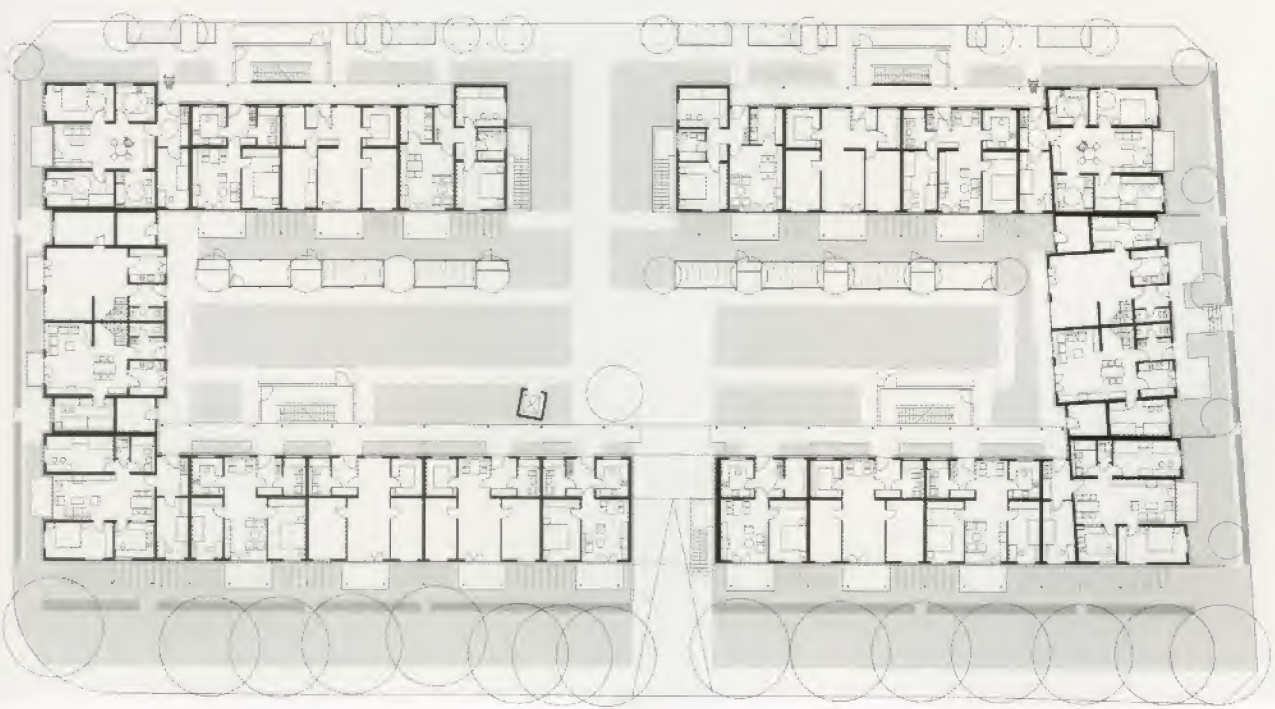
The choice of offered appartments is multifarious: 74 living units from two- to five-room apartments supporting an integrated form of living: old and young, disabled and non-disabled persons should live naturally with each other, helping and complementing one another.

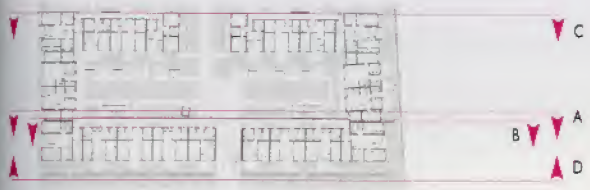
This very cost-effective and somewhat conventionally-built estate is underlined by a sophisticated color scheme.



The project fills a whole block following the urban regulations of the site.

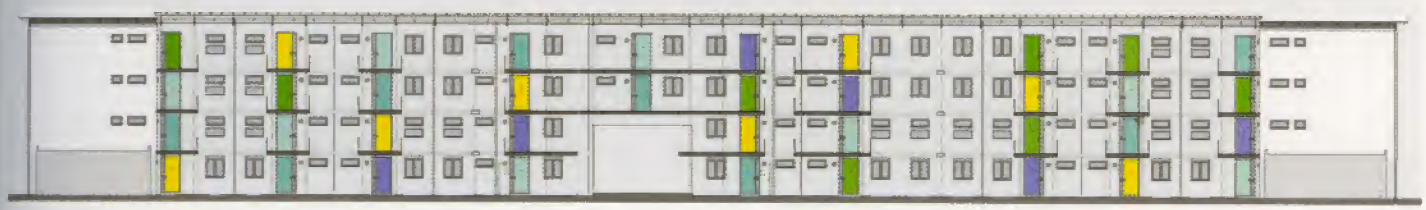
A built perimeter, apparently hermetic, houses a big interior garden open to its inhabitants as well as the rest of the citizens.





The elevation's colors and the exterior gangway system are two distinctive elements of the building and a special contribution to the urban context.

Elevation A

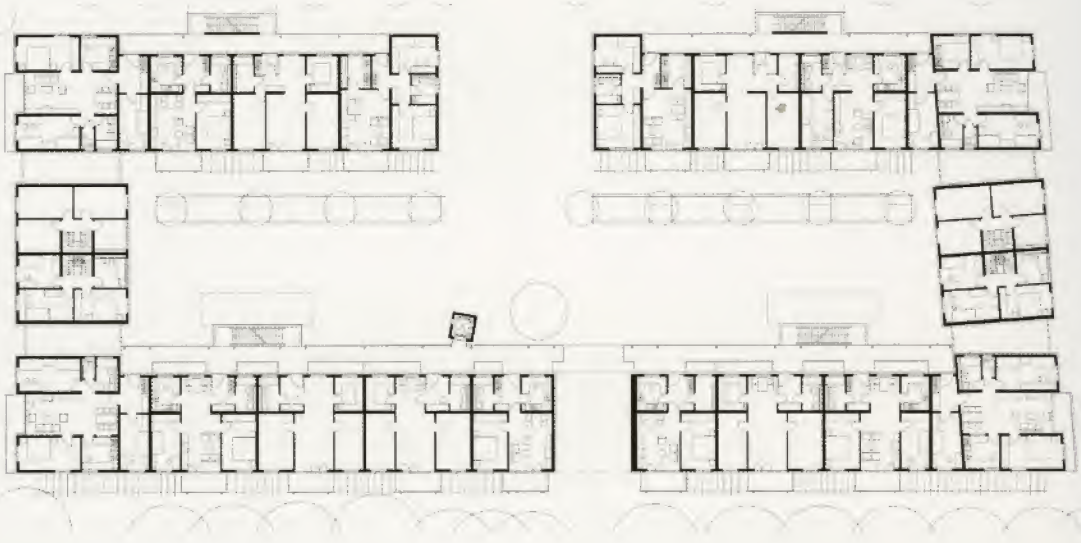


Section B

Section C

Elevation D

Standard floor plan, second and third floor



Standard floor plan, first floor

Ground floor

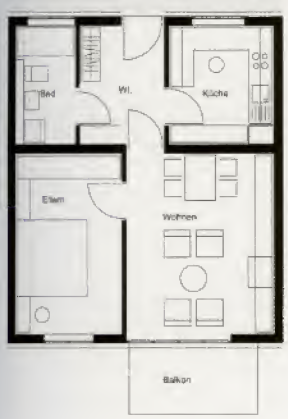
First floor

Second floor

Third floor

	TYPE 1	55 m²
	TYPE 2	70 m²
	TYPE 3	95 m²
	TYPE 4	95-98 m²
	TYPE 5	105 m²

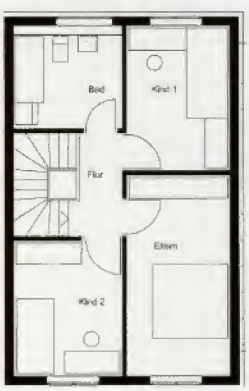
Type 1 floorplan



Type 2 floorplan

Type 3 floorplan

Type 4 floorplan: duplex



Type 5 floorplan: adapted dwelling

KCAP

"Maaskwadrant"

Hoogvliet, Holland

Photographs: Jan Bitter

This new suburb is located on the old RET terrain which lies at the bend of the river Maas. It is very well connected by subway to the center of Rotterdam. When we zoom into the location we see rows of trees and ditches, which form the basis of the plan, and an appealing green 'room' for the houses. The object-like interpretation of the suburb and the retention of the green combine to form a new residential area of almost 200 dwellings within this 'green room'.

The urban plan has 4 strips where the public space lies in between the buildings. The plan consists of high-rise buildings oriented towards the river and low terraced housing between the trees with entrances on a secluded side-street. Each row has no more than 3 or 4 houses. The open spaces between the patches of buildings are focused on the river Maas, allowing all houses to have a relationship with the water.

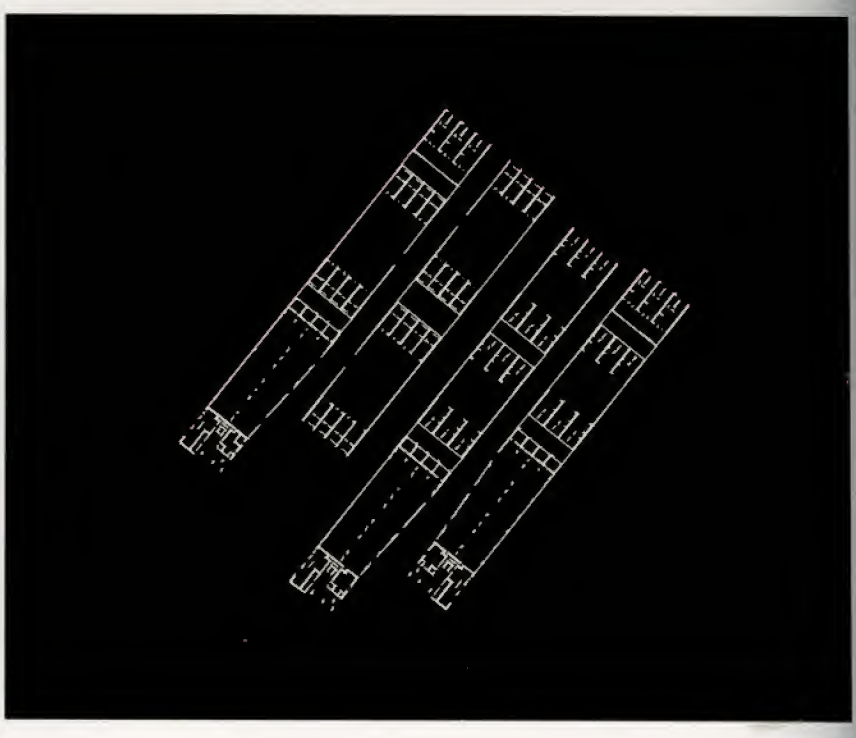
The high-rise buildings are connected to the terraced housing by a collective garage. There is thus a strong connection between the low and high-rise housing. The proposal is one of clear architecture where the materials and composition of the facades makes the relation between high-rise and low apparent. The front facades of the dwellings have different themes and thus give a different atmosphere to each entrance space.

In the plan there are about 35 social apartments for rent. This plan makes it possible to completely incorporate the social housing into the design, giving the social sector apartments the same appearance as the more expensive apartments.

The blocks are surrounded by walls and greenery, so there is a clear separation between private and public space. The facades towards the street have large windows, a social gate to the public space. The high-rises have 3 apartments on each floor, thereby allowing the towers to have a small profile and leave a lot of air and sky open towards the water.

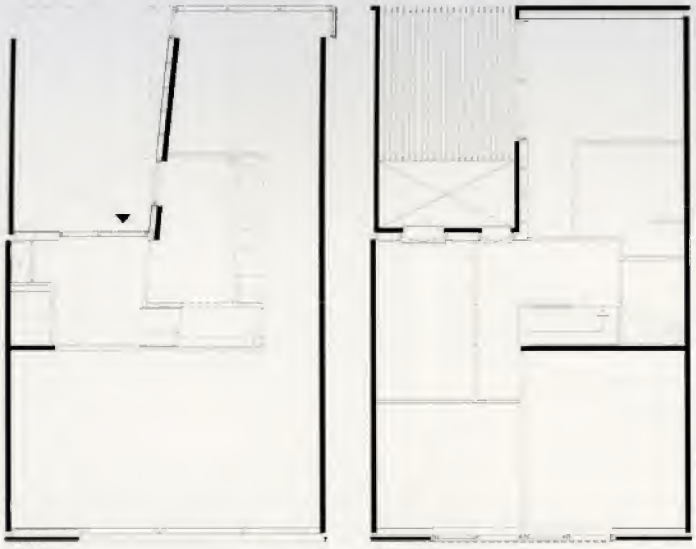
The high quality materialization of the garages and the garden wall produces a high-quality continuing of the whole plan.

Four fringes intertwined with public spaces form the project. Big towers with low terraced dwellings are combined in each fringe so that they can all enjoy the proximity to the water.



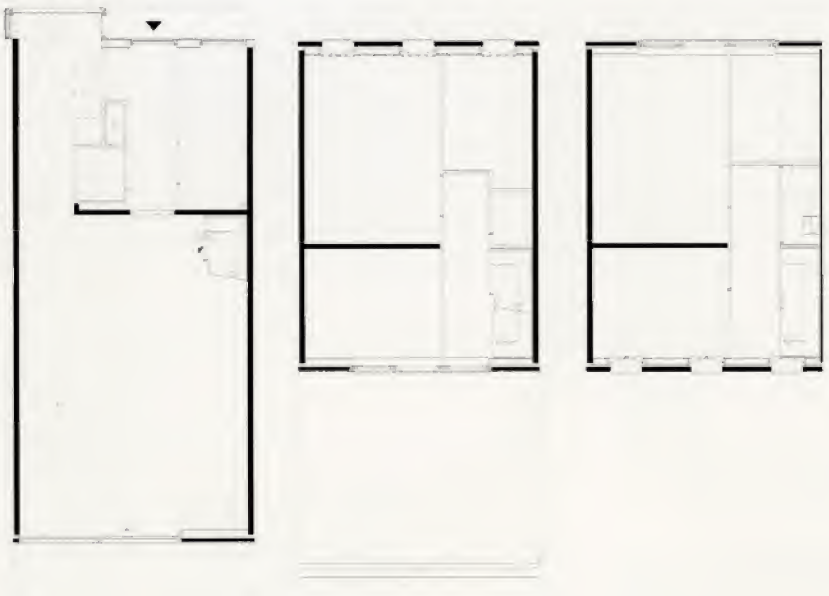
Apartment tower and single-family houses elevation.

Dwelling type 1



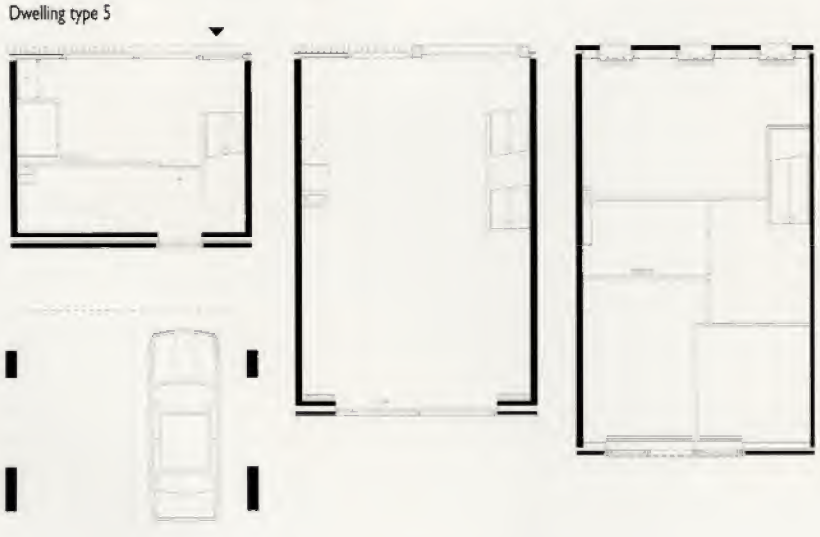
Dwelling type 2

Dwelling type 3

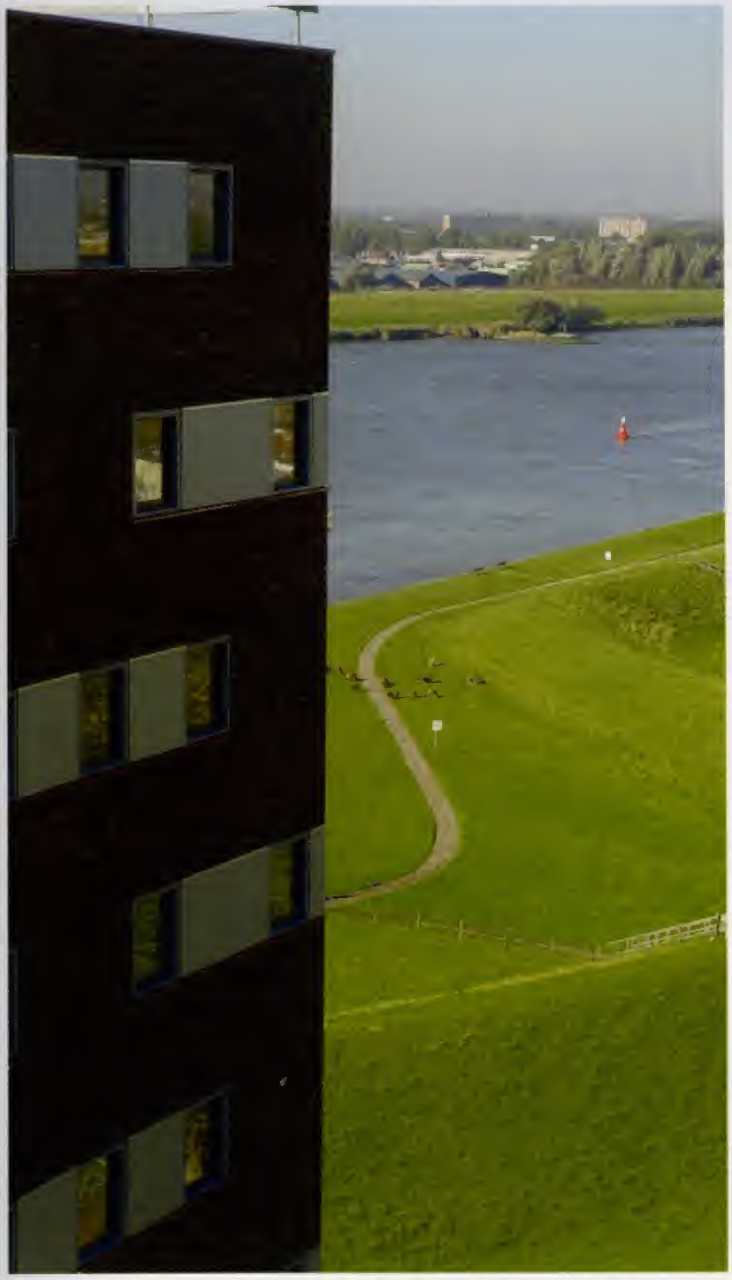


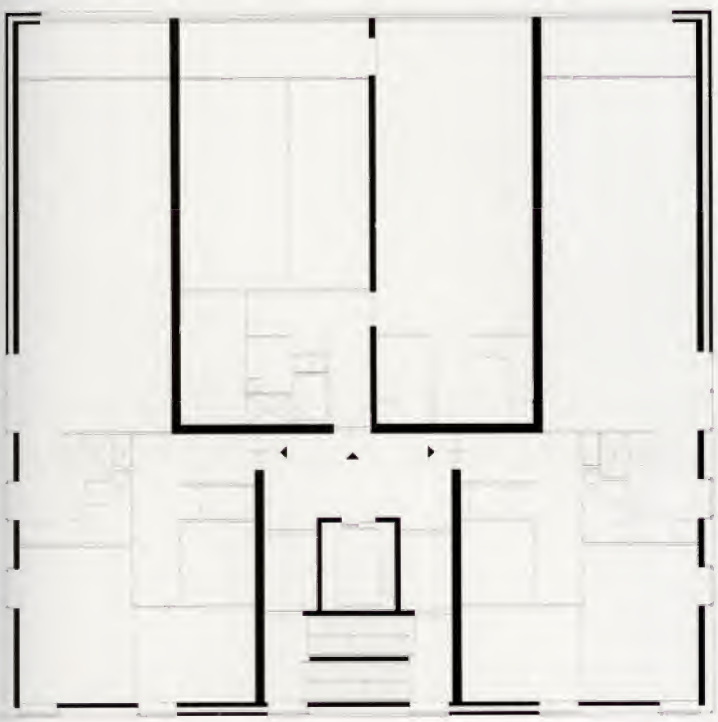
Dwelling type 4

Dwelling type 5

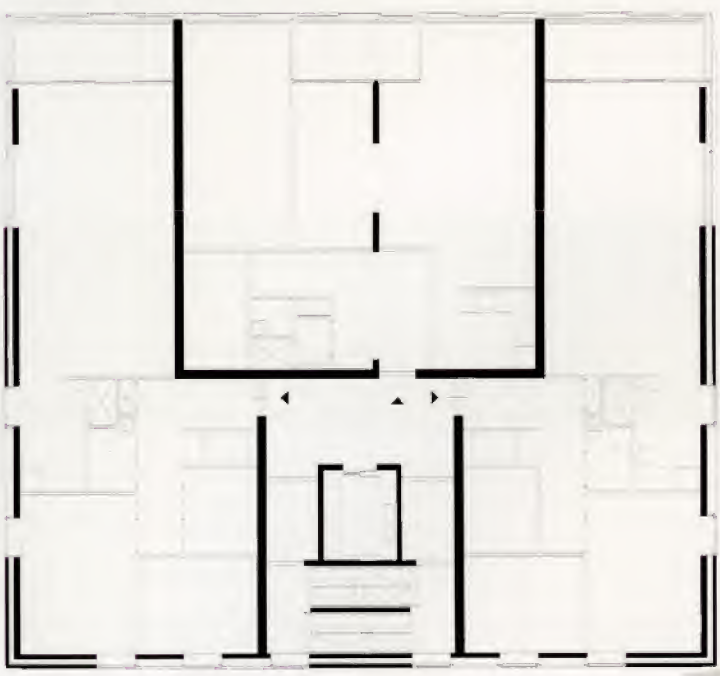


The single-family houses and the towers, independent at first sight, share the same façade materials and a common garage.





Tract floor plan, second and eighth floors: the three dwellings in each level enjoy big openings towards the Maas.



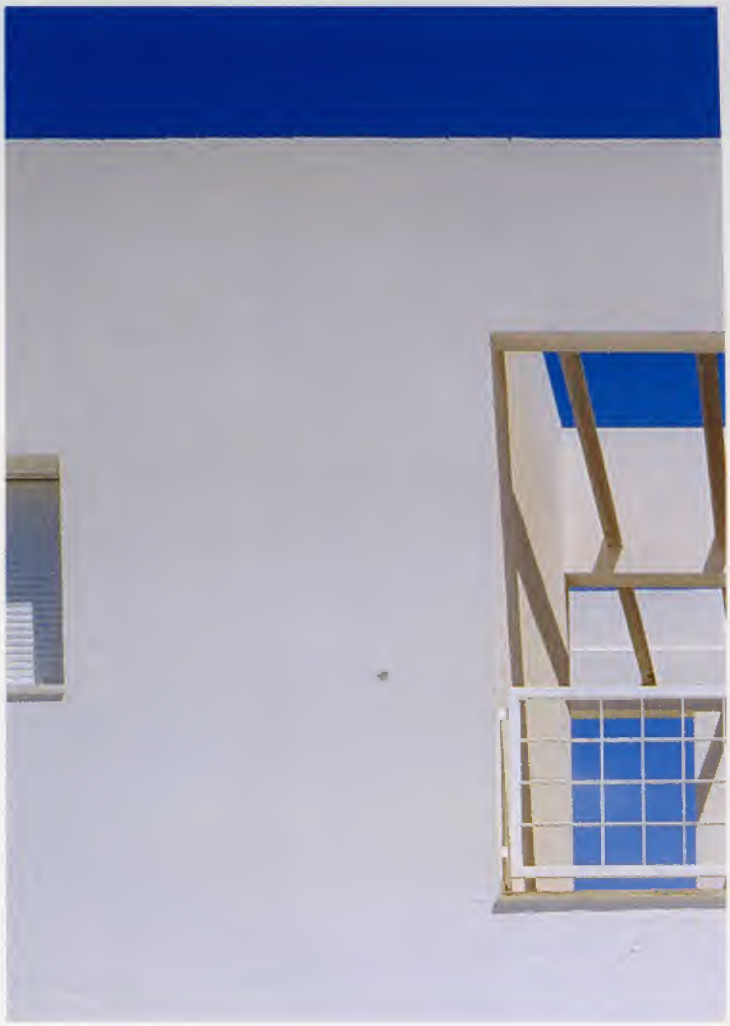
Ramón Pico & Javier López

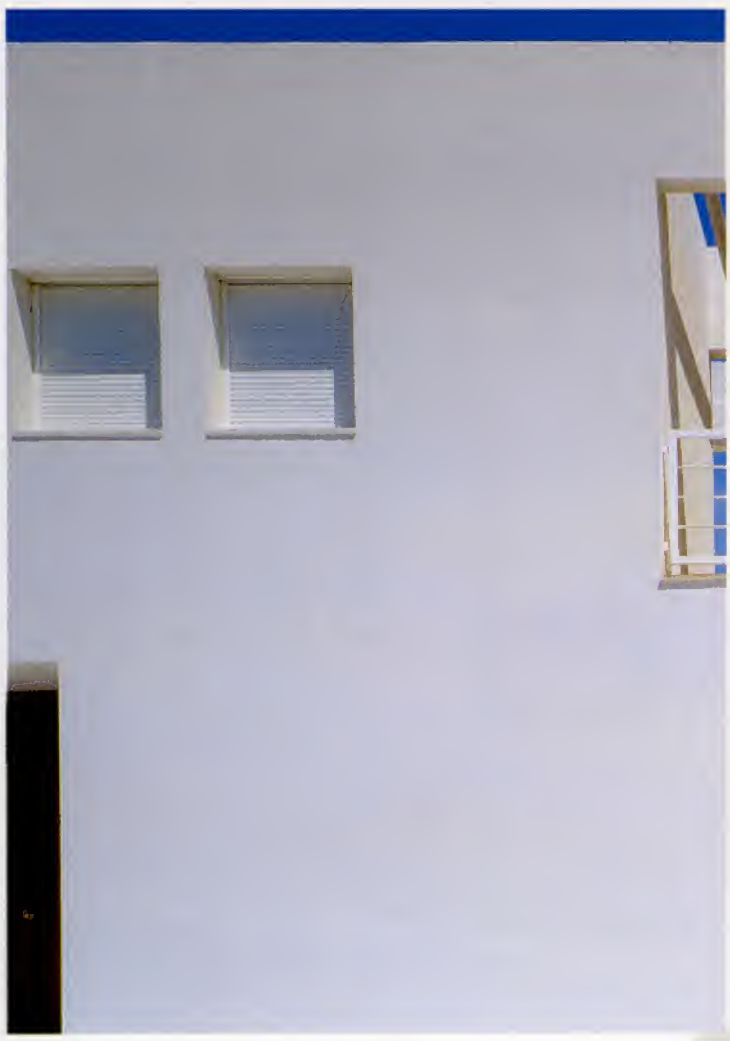
Selfbuilt Houses in Doña Blanca

Seville, Spain

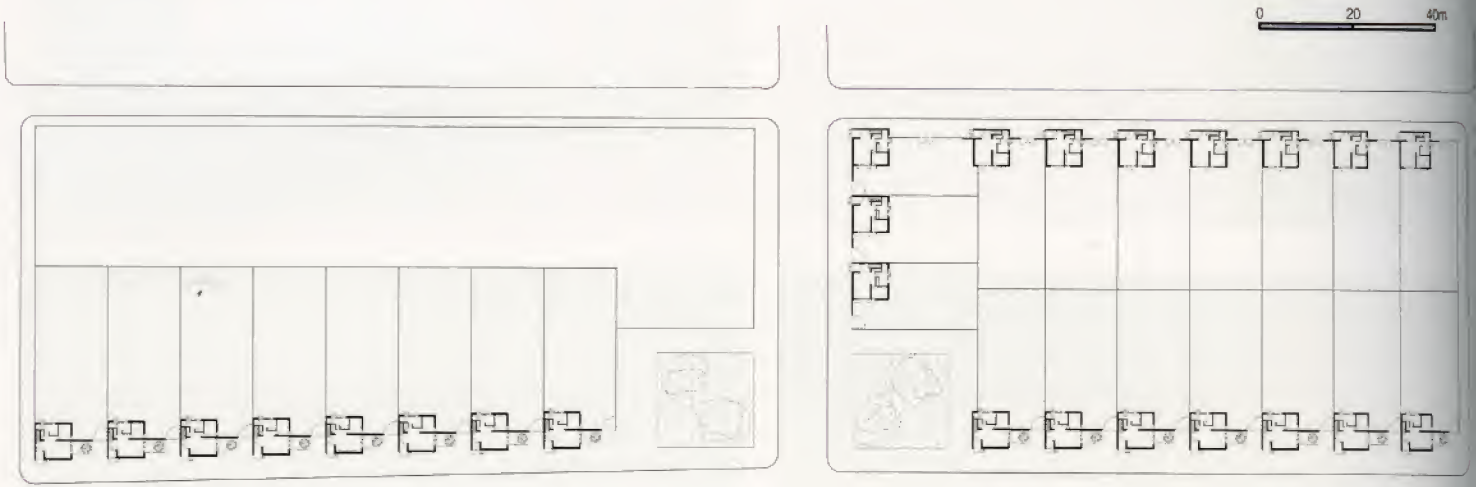
Photographs: Fernando Alda

During the sixties, the National Institute of Colonization built this settlement in an attempt to exploit the swamp. The town is thus implanted with a regular layout on an unreferenced plain.
Towards the north, the balcony of la Bahia on the San Cristobal Sierra overlooks the village. From the road at the foothill of the Sierra, the swamp and the village offer a very beautiful plastic image.
To the south, east and west, the horizontality of the dry valley of the Guadalate is the only valuable reference for an urban development.
The town's image is typical of the late era of this sort of settlement, incorporating regularized motifs of vernacular architecture into a rationalistic whole. The buildings closer in time and space to the plot refuse this in favor of a truly folkloric image.
The image of a few white cubes confronting the swamp. The repetition of these volumes, occupying the corners of the lots in a simple arithmetic division and completing the town's orthogonal scheme, pretends to evoke an abstract image as a counterpoint to the meadow's horizontality.





The repetitive abstraction of a precise and powerful volume confronting the swamp's rough profile. The interior courtyard is accessed through a gate situated between the cubes. This courtyard is left intentionally unplanned to be developed later on by the inhabitants

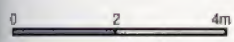


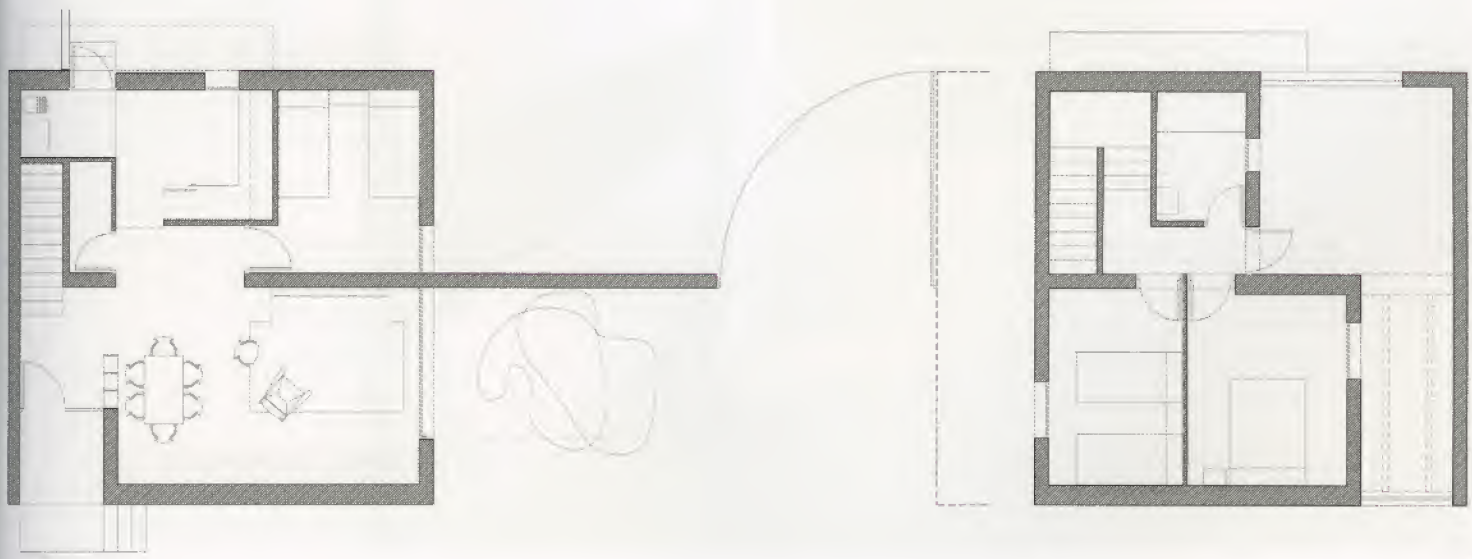
Ground floor, general layout.

North elevation facing courtyards

South elevation facing the swamp

The living room and main bedroom open towards the street and the southeast, towards the plot's best views. The service area, kitchen and bathrooms are oriented toward the interior.

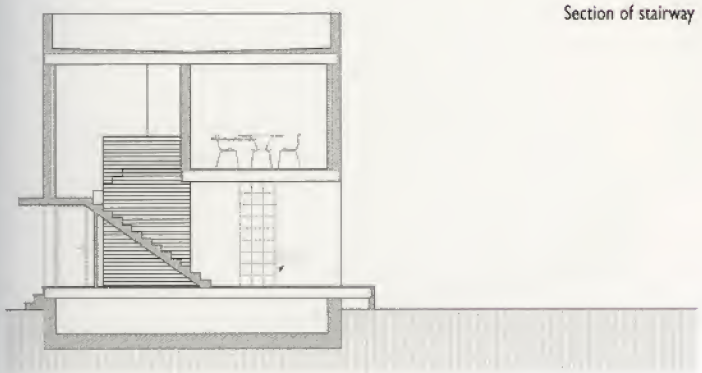




The homes enjoy the best views from the plot facing the swamp and Medina Sidonia.

house is enclosed within a cube measuring 7.8 m on the sides.

Section of stairway

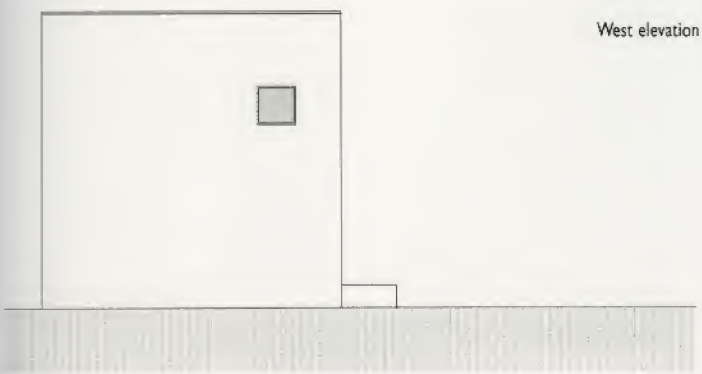


Main elevations, southern edge

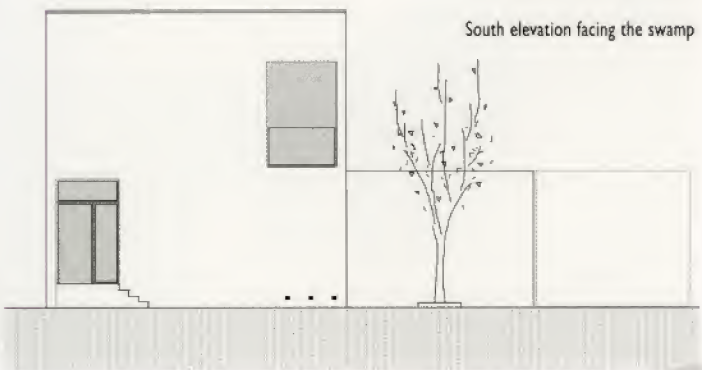
North elevation facing courtyards

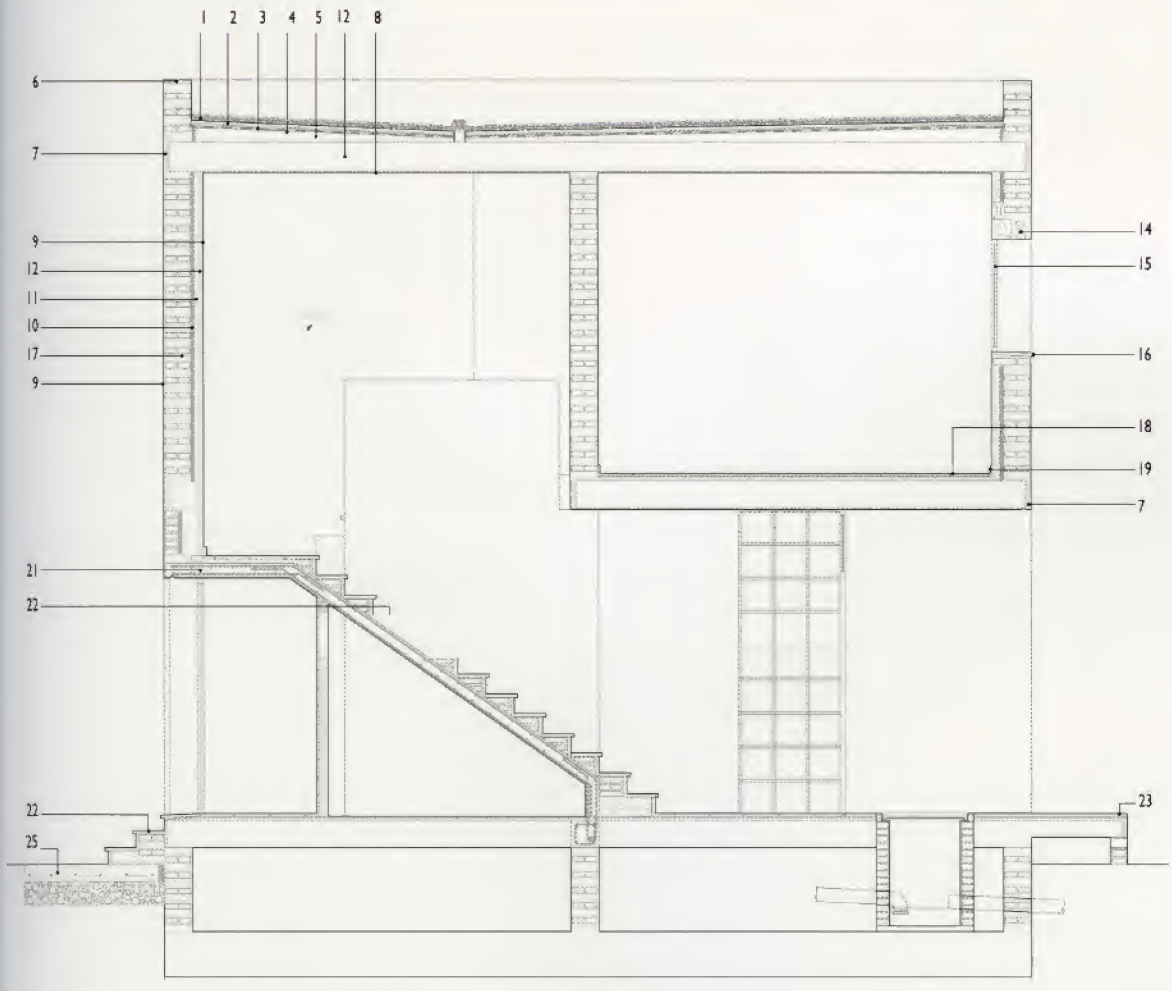
East elevation

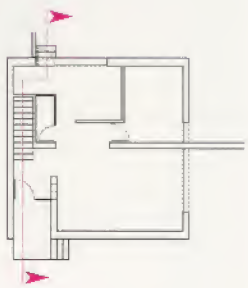
West elevation



South elevation facing the swamp







1. Loose gravel layer e=5 cm
2. Polypropylene felt and non-extruded polystyrene thermal panel e=30 mm
3. Waterproof asphalt felt e=4 mm.
4. Regularization cement mortar
5. Cellular concrete to form pitch, e. min. 5 cm
6. Ceramic tile copestone
7. Simple air brick slab lining
8. Three coat plaster and gypsum plaster
9. Cement mortar rough finish + smooch plastic paint
10. Glass fiber insulating panel, e=5 cm
11. Air cavity
12. Self-supporting joist slab with ceramic vault, 22 +4 cm
13. Simple airbrick partition wall
14. Self-supporting joist breast beam
15. White laqued aluminum joinery including blind
16. Limestone windowsill with drip, e=3 cm
17. Bearing wall: air brick with solid brick footing
18. Ceramic stoneware ground slab
19. Ceramic stoneware skirt board
20. Exterior rough finishes with smooth rubber-base paint
21. Reinforced concrete stair slab
22. Cast stone steps, e=5 cm
23. Float finish concrete
24. Reinforced H-175 concrete slab foundation
25. H-125 concrete ground slab, e=15 cm + newel layer
26. Ceramic tile 14x28 cm

Ian Ritchie Architects

Scotland's Home of Tomorrow

Glasgow, Scotland

Client: Thenew Housing Association
Photographs: Alan Crumlish Photographs

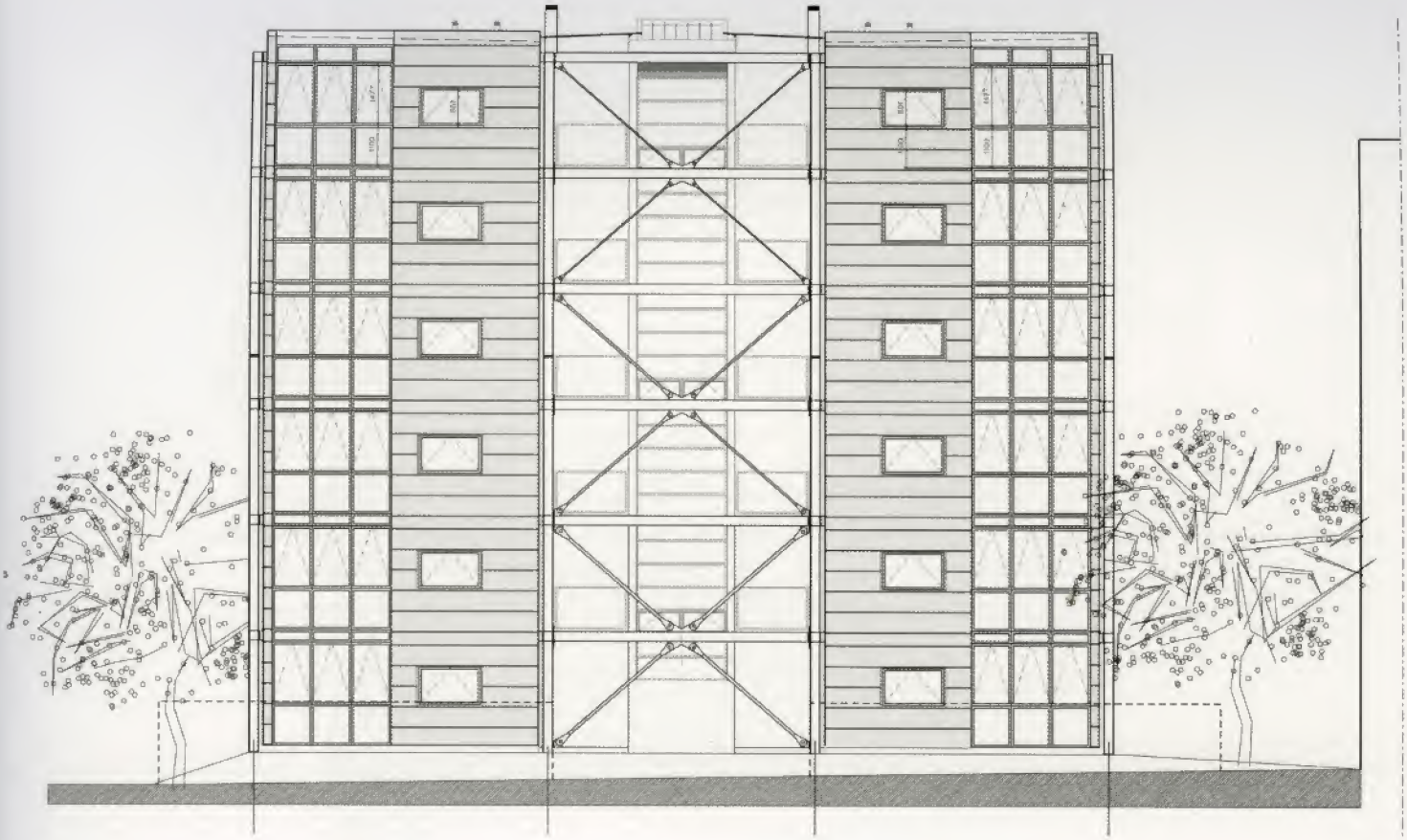
Some of the main goals to be achieved in this project are developed by a great diversity of solutions through flexibility, revaluation of the shape, its building process and construction methods focusing on recycling or the lessons for promoters, insurance company, engineers, etc. with respect to sustainable design as something essential to take into account.

Flexibility is derived from studying economic and ecological matters and its long-term efficiency; a good flexible design must be able to solve the changes in family structure and lifestyles. The frame for serendipity is provided by the city but rarely in housing estates.

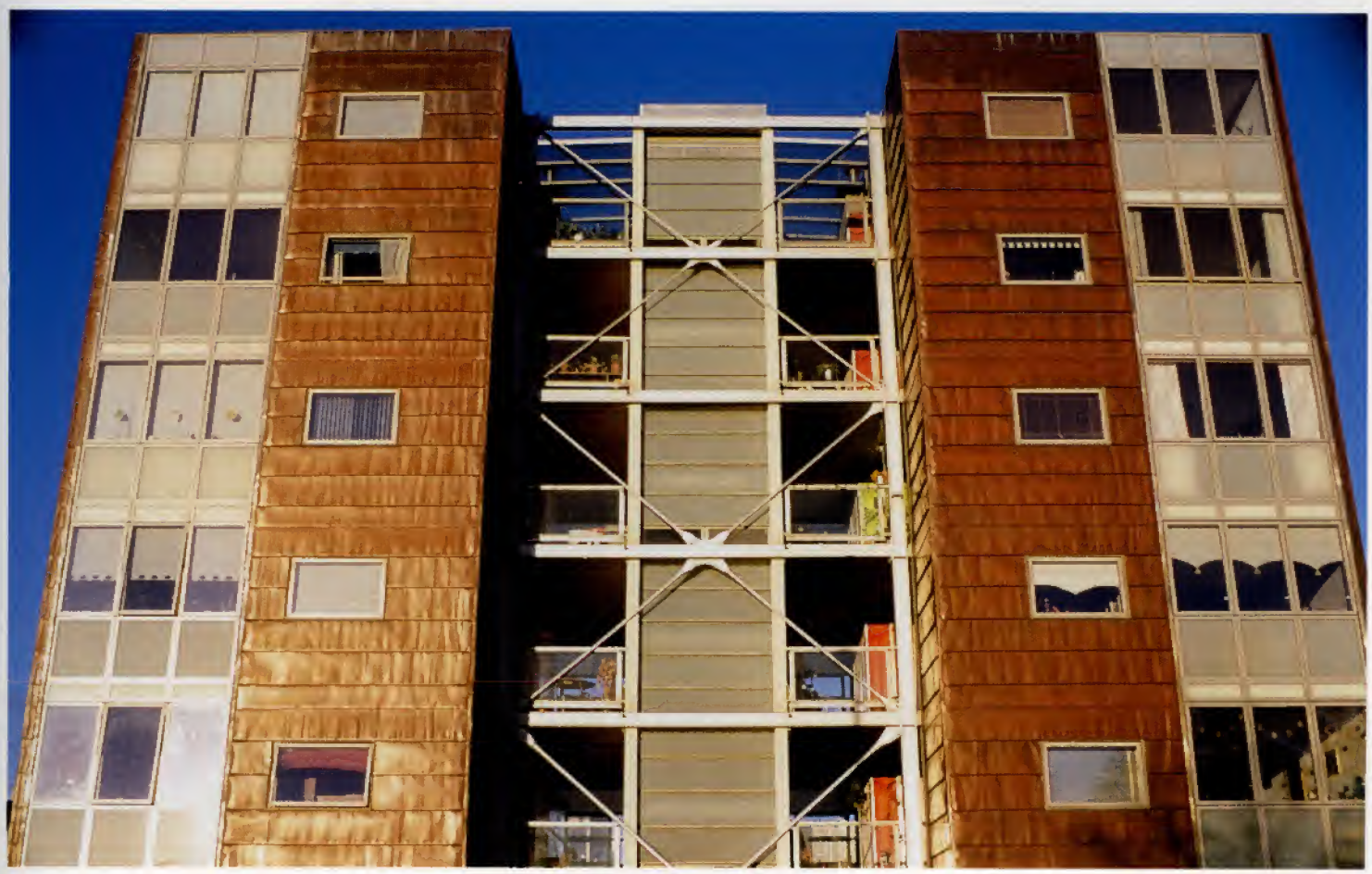
Ian Ritchie's team of architects explains their approach to design based not only in the visual sense but also in the rest of the senses. Light, air, energy, water, and time become their material and immaterial ingredients. A design with a comprehensive approach will optimize the projectual and constructive systems and processes to a greater extend than trying to optimize singular parts.

Visually, the building is conceived as an autonomous body in the urban context, completely open to sunlight. Touch is revealed through the chosen materials and their texture, and in an apparently immaterial way in the air that flows freely through the dwelling generating clean and healthy environments. The acoustic perception is taken care of through the acoustic insulation of the dwellings, between them and with the exterior, using insulating and absorbing materials, because acoustic comfort is good living.

Regarding the sense of smell, the project contemplates the air quality and the position to avoid unpleasant smells generated in the service areas. Other aspects such as solar collecting and its control due to thermal needs and natural light control have been planned to reduce the energy consumption of the dwelling. The project thus centers on energy efficiency which derives in an economical saving, with procedures such as the centralization and interconnectivity of household appliances, or the optimization of the energy possibilities of the materials, the building procedures, and projectual decisions.



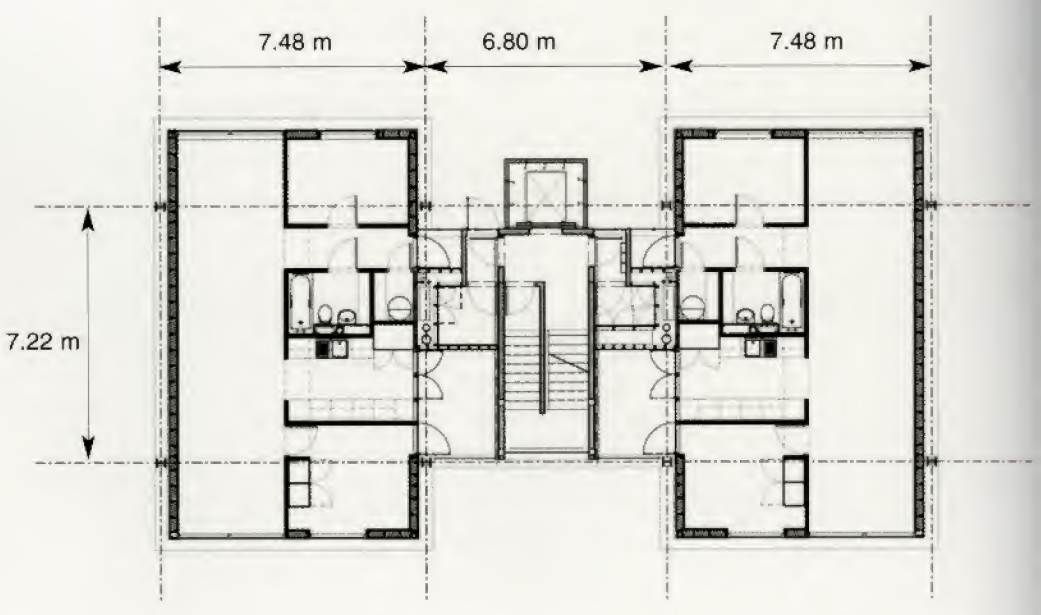
South elevation



Alzado norte

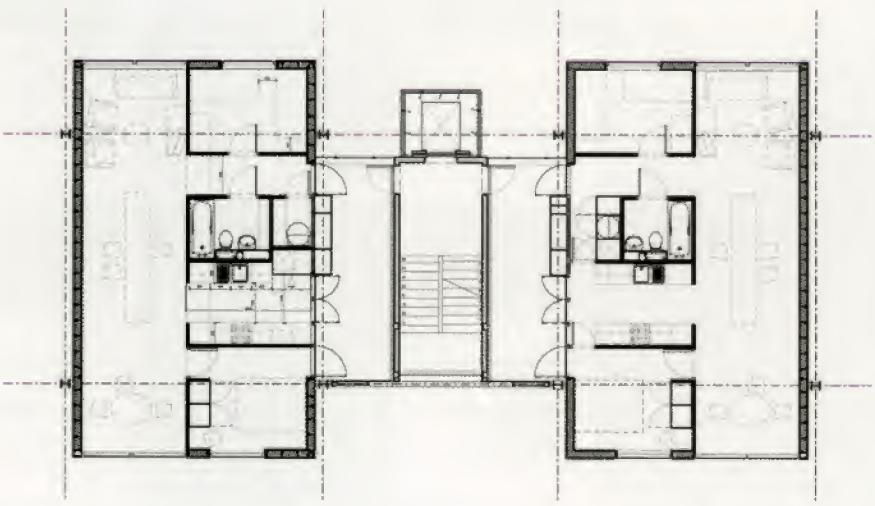
Sección por los balcones

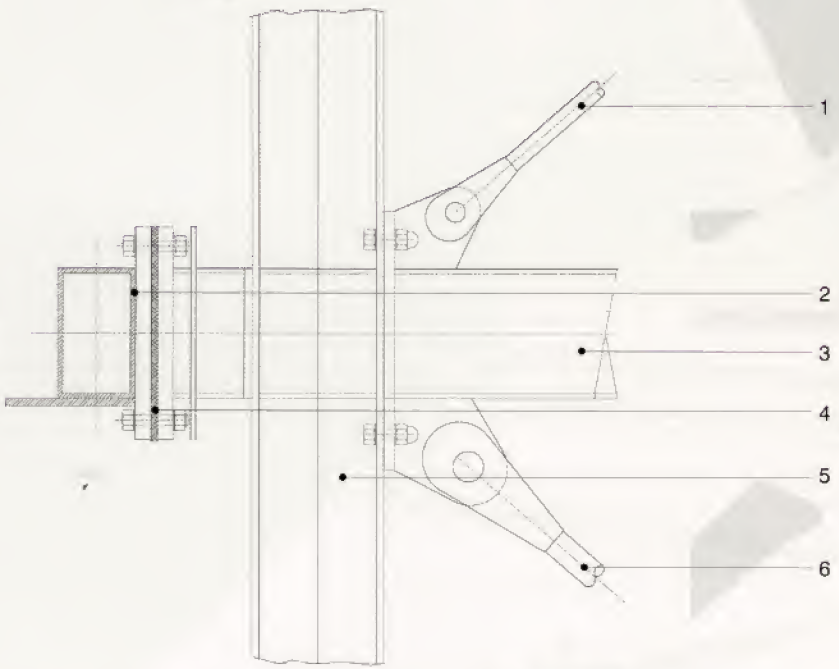
The standard floor plan organizes the living room as a double oriented space; with the service area ventilating and receiving light through the gallery.



The copper plate coating gives the façade a special texture; add this to crossed rods and you have an industrial image, quite unusual for housing blocks.

Acoustic insulation is achieved through double glass and absorbing floors and ceilings in the interior. On the other hand, the building is trespassed by light, sun, and the control of energy.

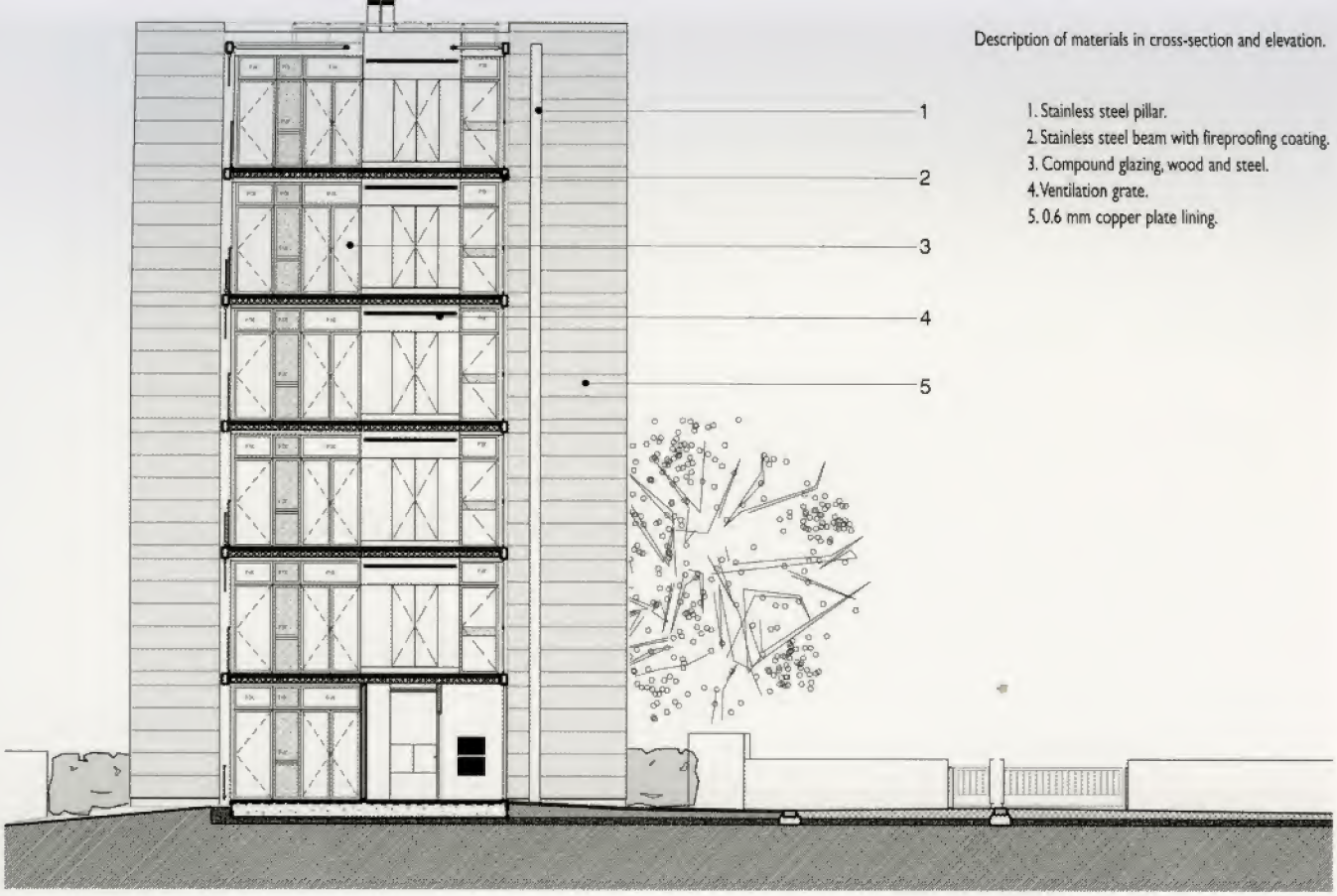




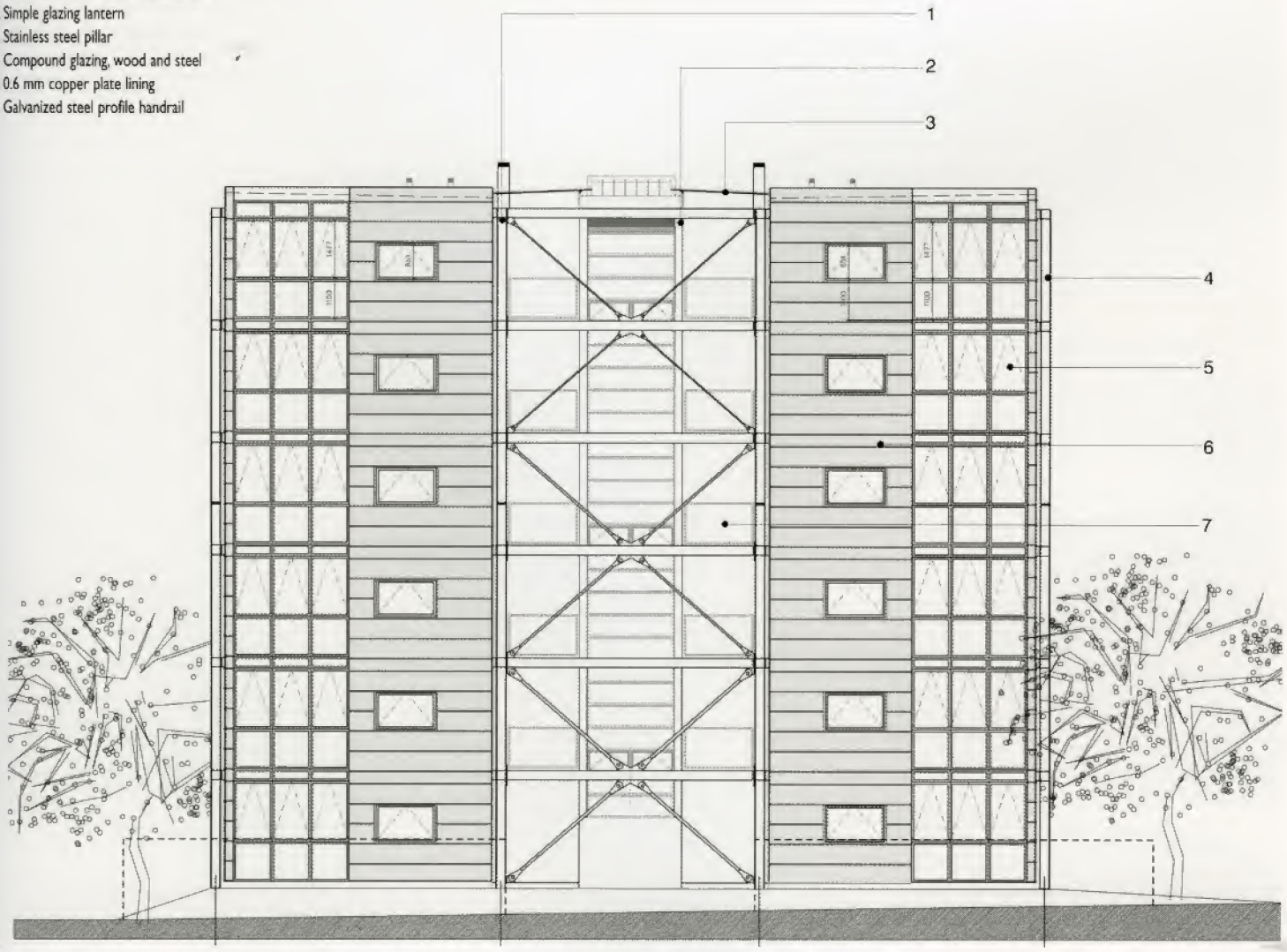
1. M36 "macalloy" bar
2. Fireproofing coated steel profile and connector
3. Steel beam with fireproofing coating and natural finishing 250 x 150 x 10 mm
4. Thermal insulation
5. Steel pillar with fireproofing coating 254 x 254 mm
6. M56 "macalloy" bar

Description of materials in cross-section and elevation.

1. Stainless steel pillar.
2. Stainless steel beam with fireproofing coating.
3. Compound glazing, wood and steel.
4. Ventilation grate.
5. 0.6 mm copper plate lining.



1. Stainless steel beam with fireproofing coating
2. Brickwork wall coated with mortar
3. Simple glazing lantern
4. Stainless steel pillar
5. Compound glazing, wood and steel
6. 0.6 mm copper plate lining
7. Galvanized steel profile handrail



Delugan_Meissl

Mischek Tower

Vienna, Austria

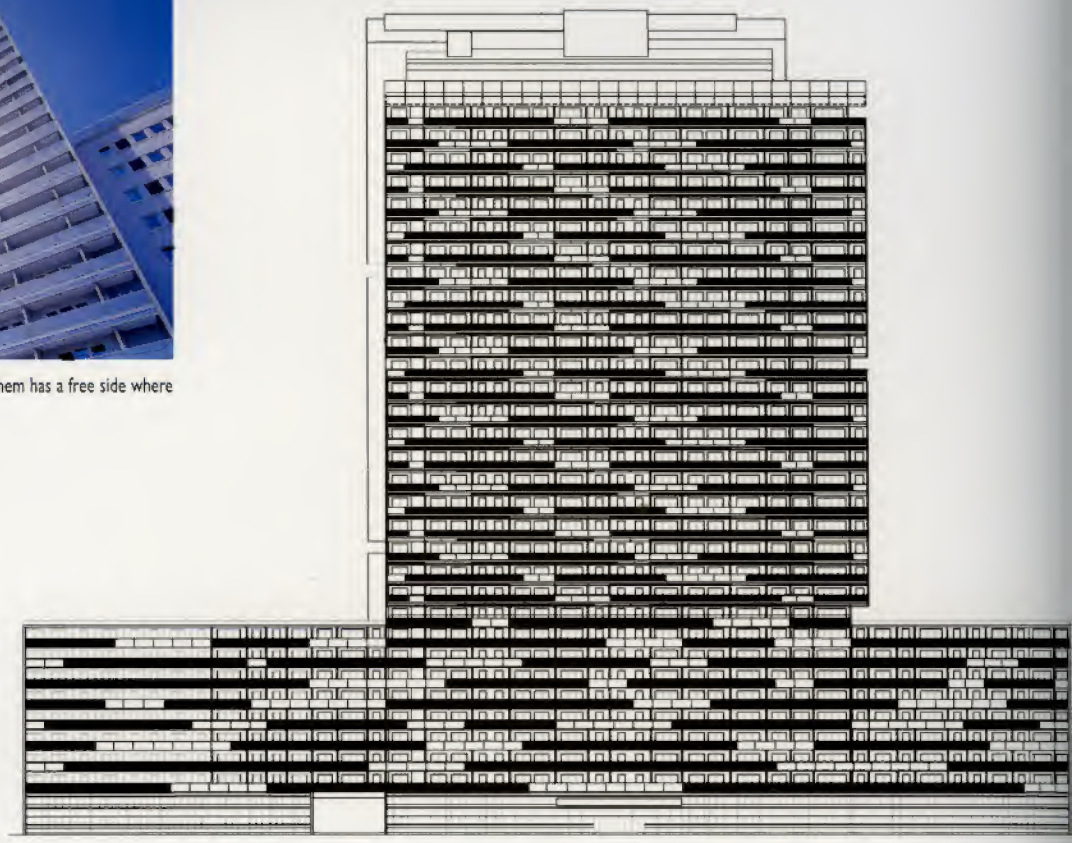
Photographs: Margherita Spiluttini

At the end of the eighties the idea of a second center for Vienna emerged, a plan that had initially grown out of the projected world. The architects Adolf Krischanitz and Heinz Neumann developed the master plan for the new part of the city. On the basis of these givens a selected entry competition for residential buildings in the Donau City was held in 1993. The prize winners developed a joint urban model in which the position of the Mischek Tower was also set down. Delugan-Meissl were commissioned to design the exterior of the tower.

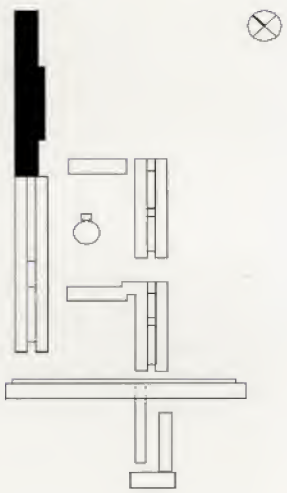
The skyscraper was deliberately designed as a slab whose two sides have a different structure. On the one hand, the horizontal curvature extending into the distance over the edge of the Donaupark and on the other, the vertical curvature emerging from the ground becoming visible in the group of surrounding high-rises. These two sides complement each other like two folded hands, one directed upwards and the other horizontally. These two sides have been joined together so that each of them reveals a free end in which there are apartments that have light on three sides. As a result, the skyscraper shows a differentiated structure and a diversity of different apartments.

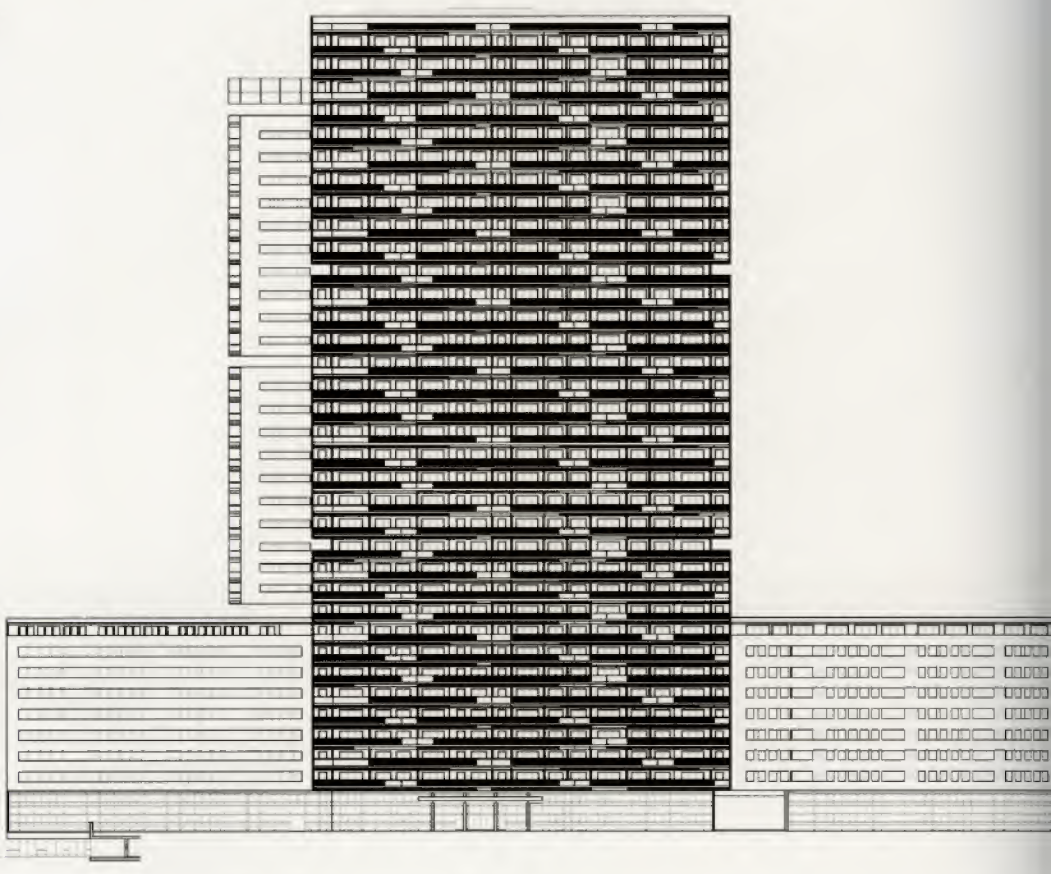
When one approaches the Mischek Tower from the south, one is welcomed by an extensive canopy of glass and metal that dynamically defines the front square, leading the visitor into the lobby of the tower where this canopy is continued as a metal ceiling. The walls and ceilings of the lobby consist of white, meandering sculptural slabs in front of a background covered with high-sheen black paint. Black granite has been used as a floor covering. The space thus has a fascinating atmosphere that is very unusual for apartment buildings. The phenomenal view makes it imperative to furnish each apartment with high-standard leisure space to be able to make optimal use of this central asset. Both sides of the façade are continuously equipped with two layers to accommodate loggias. The inner windows have been designed to run from the ceiling to the floor and the outer layer of the façade, the parapets of the loggias are constructed half of glass and half of aluminum elements. The outside glass has a fine litex-dot raster imprint and is 1.2 meters high so that it is possible to look out, while at the same time avoiding a sense of vertigo. The loggias along the lateral edges of the high-rise are equipped with frameless glass folding elements that make it possible to close the outside rooms of the loggias. To be able to offer this option for all apartments without compromising the total impression of the building, Delugan-Meissl developed a "façade interplay" with glass and aluminum elements that have been mounted facing each other so that no continuous rhythm is created optically. This way the façade is able to retain its uniform appearance, even if the tenants later equip certain spots with glass elements that were designed by the architect for this purpose. The individual design is thus possible without coming into conflict with the rest of the building; the total impression thus results from the contingency of individual design without the façade dissolving into a collection of single impressions that do not relate to each other in any way.

Both façades are united in such a way that each of them has a free side where the apartments have 3 façades.

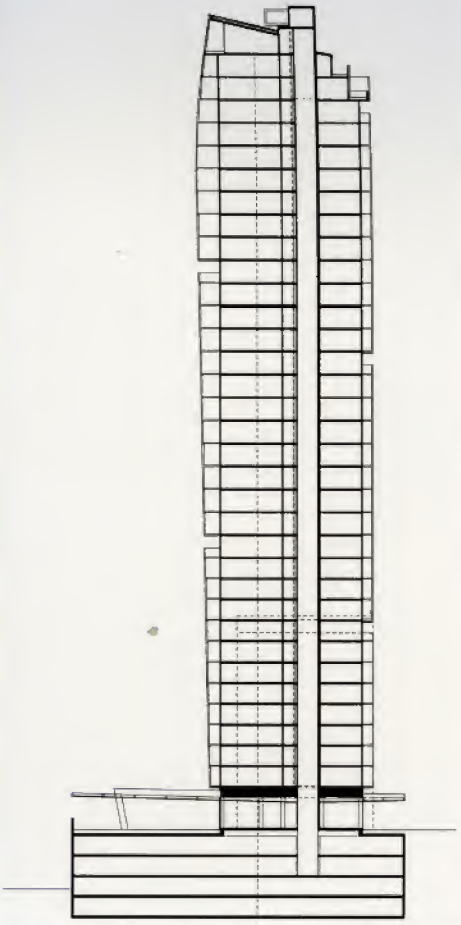


North-western elevation





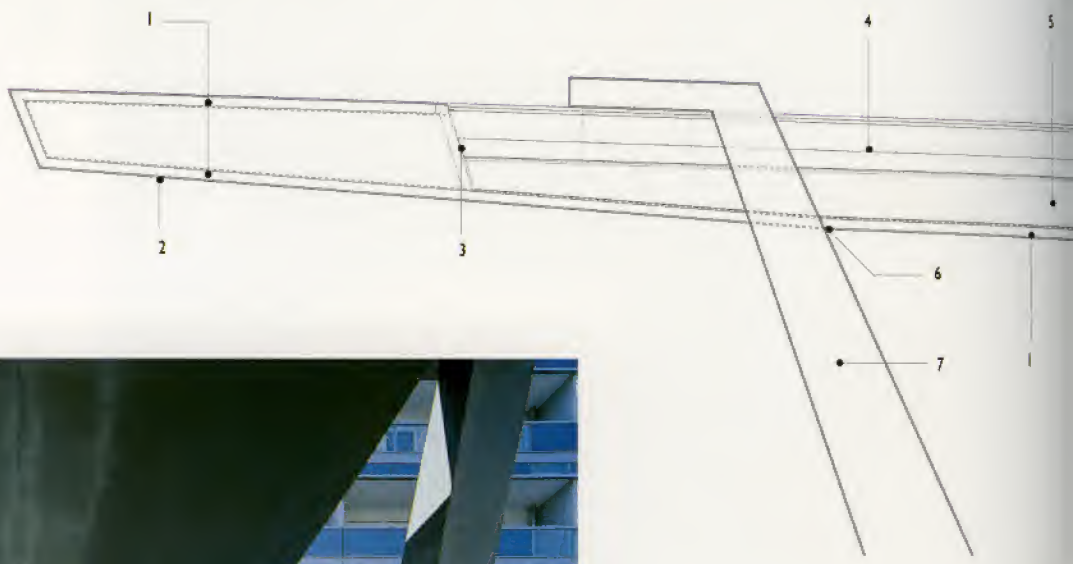
Southeastern elevation



Cross section

Northeastern elevation

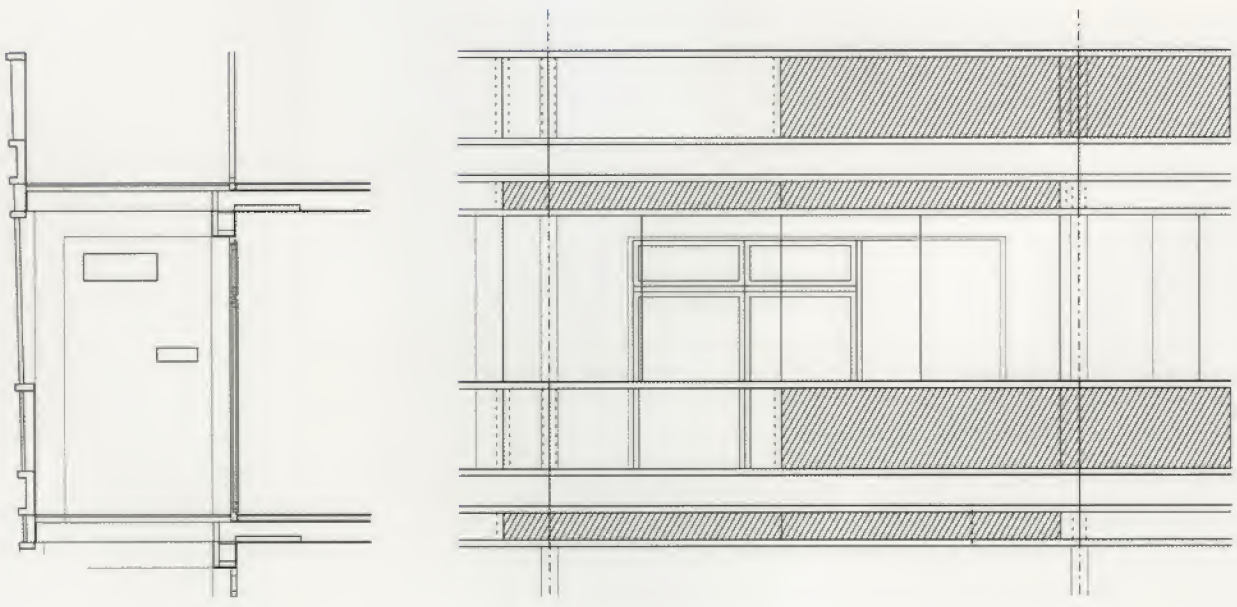
This spectacular marquee extends towards the hall's interior as a metallic ceiling.



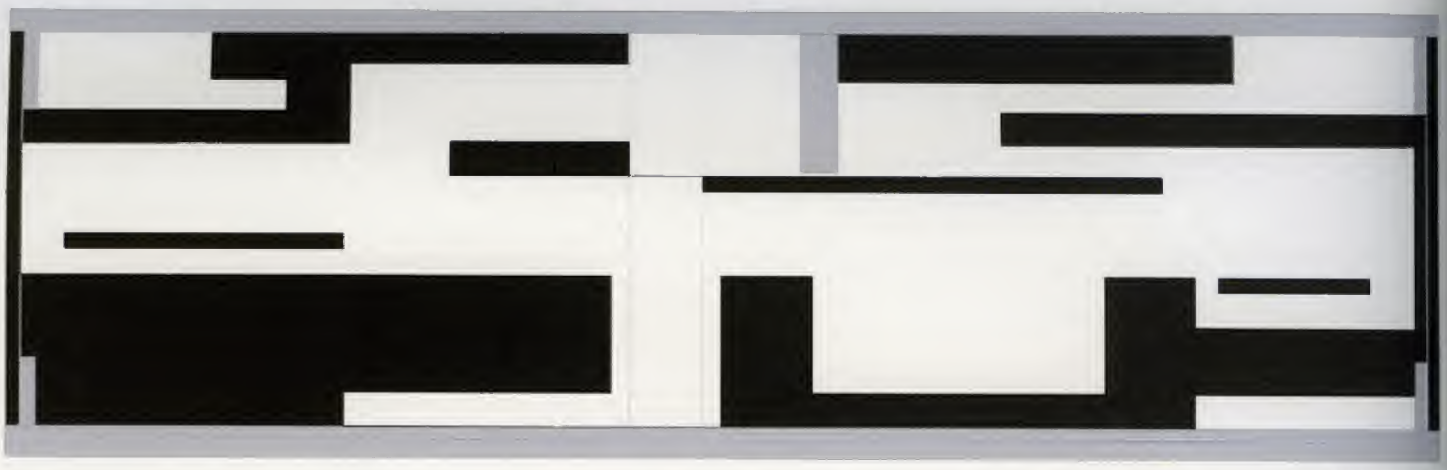
Marquee detail:

1. Tubular structure
2. Aluminum coating
3. Tube's supplement
4. Support-Bolsters - Glass
5. Beam - Calculation's section
6. Starting point of varying cross-section
7. Steel support

The 1.2-meter-tall hatched exterior glass prevents the feeling of vertigo. The terraces along all the building's perimeter have folding glass panels without any structure, which allows them to become closed rooms.



Terrace elevation and cross-section.



Hall's interior elevation.

The white broken sculptural figures contrast with the background, black shiny ceiling and granite floor.

Joan Pascual Argenté

Housing in Nou Barris

Barcelona, Spain

Photographs: Alejo Bagué

The building is located at Barcelona's freeway exit toward the Nou Barris district. Its front elevation is aligned with Paseo Valldaura, the main artery of this area of the city in constant renovation (construction of parks, public facilities, social housing, etc.) to solve the usual handicaps of the housing states developed during the 50s and 70s. The neighboring buildings reflect the urban criteria prevailing at the time. Grouped in three 15 story-high towers on each side of the street. Attending to the conditions of the environment, the project proposes a radical alternative to the stipulated regulations, which proposed a 106-meter-long, ten-story high barrier with 4 flats per landing including intermediate patios, inscribed in a 22-meter-deep primary volume. Due to the building's height the illumination patios became ventilation chimneys.

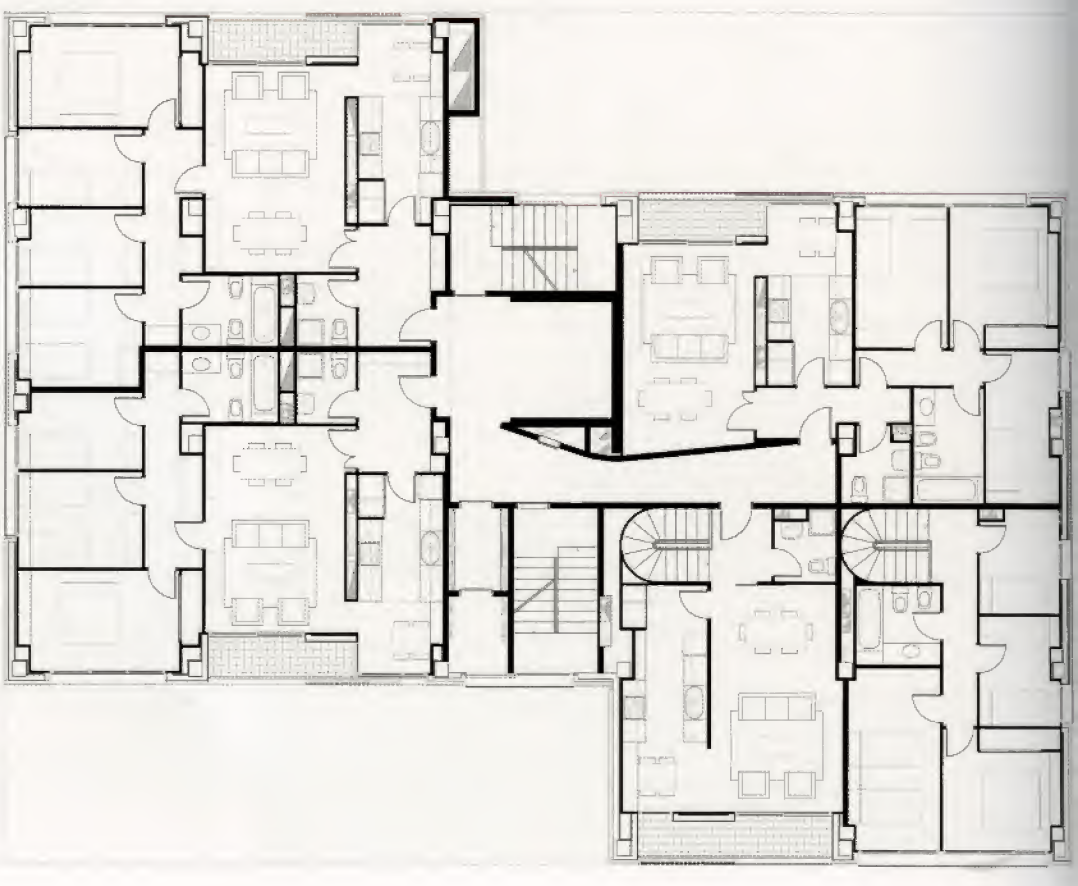
The built volume comes as the result of a process that always bears in mind the three tower series along Paseo Valldaura. The volume is conformed by 15, 11, and 8 level buildings that either respect or are set back from the street's or the interior yard's alignment.

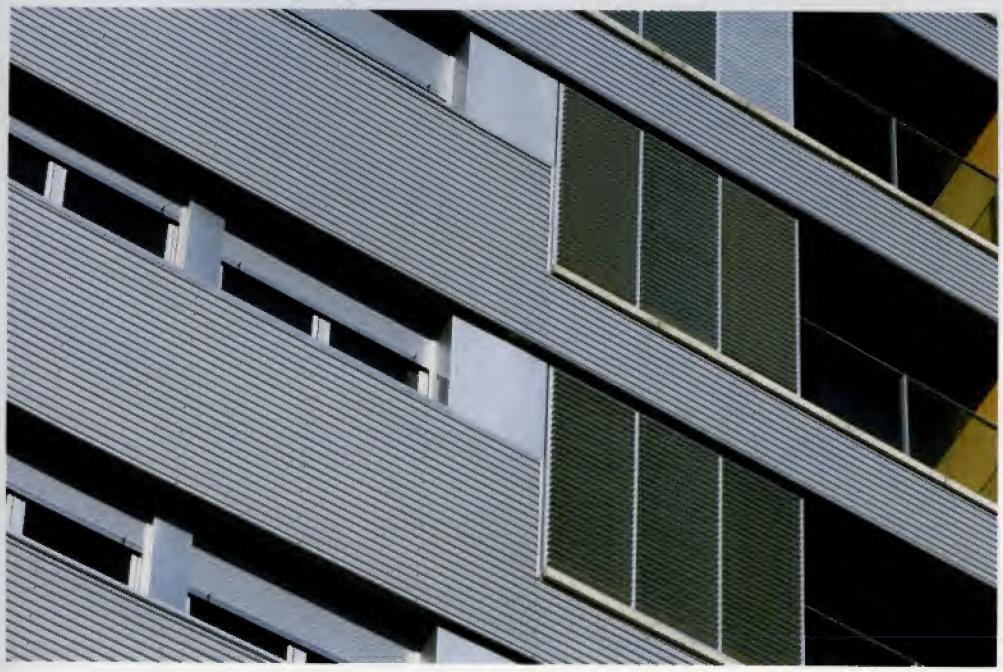
One of the biggest difficulties the project had to overcome was to tally the grouping of flats and the amount of elevators and staircase regulations demanded for fifteen-story buildings, double that of lower buildings. To provide an adequate proportion of common space every elevator provides access for up to 6 flats per landing. The particular conditions of the building regarding its situation and complex volume lead to an unconventional enclosure selection. Part of the parapets are clad in pre-cast concrete panels reinforced with glass fiber (G.R.C.) These panels are lighter than conventional reinforced concrete panels and the absence of steel rods reduces rusting problems. The exterior finishing was accomplished through a special sanding technique of the surface aggregate layer.

The complex forms a double relief in plan and volume rising from a continuous plinth intended for commercial activities. The building's relief is emphasized on the façade with the contrast between the GRC panels and corrugated aluminum panels of the cladding and the terrace's wide openings.

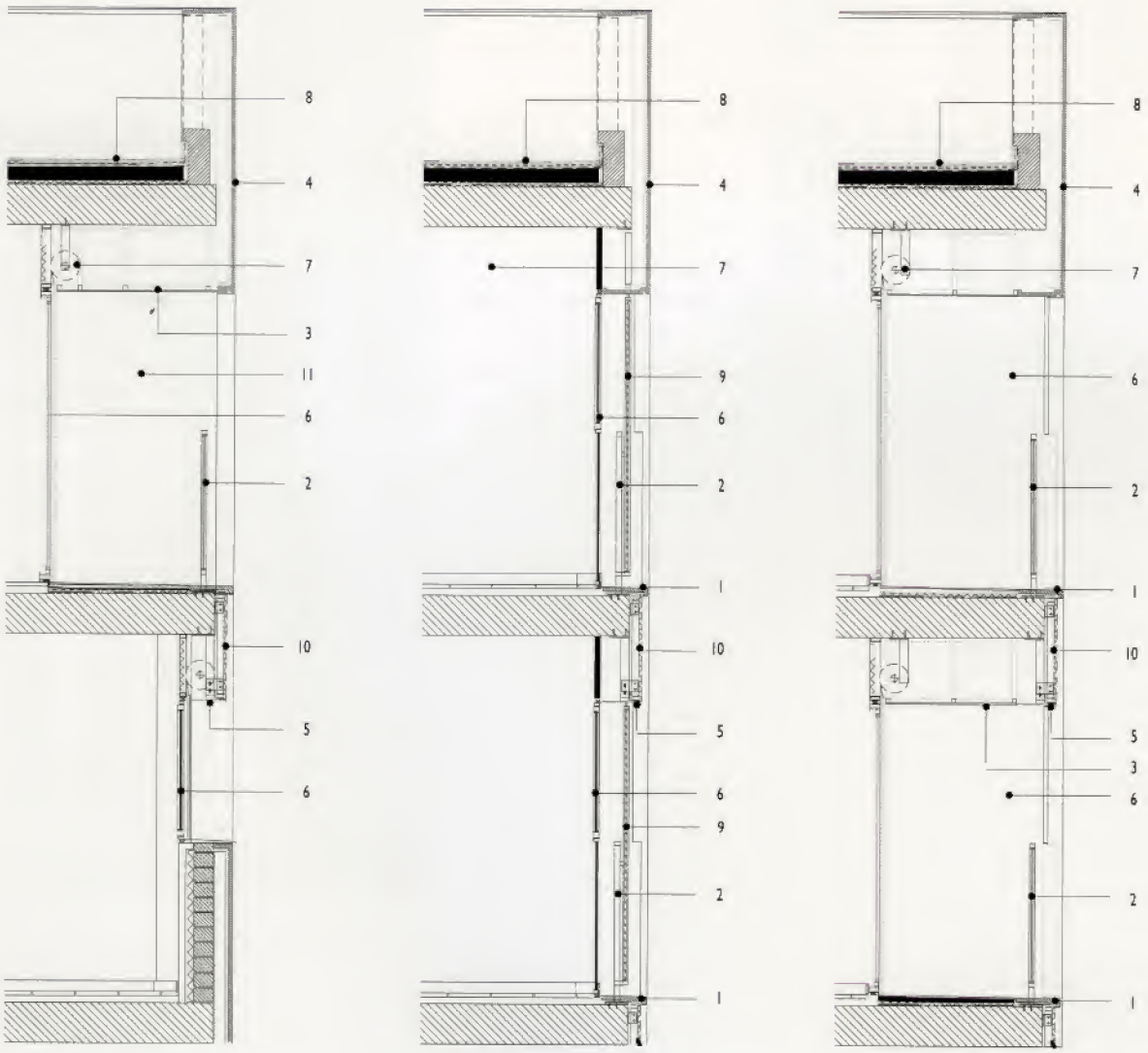
Main Elevation

All dwellings share the same conception for daytime space: kitchen-dining room in contact with the living room and grouped service areas. The cavities for the buildings' technical installations can be inspected on each floor level.





The parapets of the terraces are covered with gentle materials: varnished wood false ceilings, ochre stucco, transparent glass rails and panels with movable slats to protect the drying places.



1. Cast stone finishing
2. Handrail: galvanized plates + laminated glass 5+5mm
3. Drop ceiling: "marine board", 5-layer plywood screwed to galvanized steel screed
4. Façade: GRC "shell" type panel, double wall extrados: brick (15 cm) + air cavity with ther mal insulation + interior air brick wall (5cm)
5. Lintel: galvanized steel plate (8 mm)+ complementary structure 50/50mm T welded to plate anchored in slab
6. Flat silver color aluminum joinery + insulating glass 6+6+4mm
7. Rolling aluminum shutter blind, Aluthermic-45
8. Roof finishing: 20x20 cm stoneware floor
9. Orientable slats Grandpanel-80
10. Laqued silver metal corrugated plate over 50x 50mm aluminum profiles
11. Single layer stucco, finished with two layers of resin based paint "Virex"

Catherine Furet

Housing in Rue Leblanc

Paris, France

Photographs: Jean-Marie Monthiers

This project is located at the limit of Paris' central districts, along a railroad track that runs parallel to the peripheral boulevards. The site presented two difficult starting points: a limited depth, with a seven meter long wall slanted by the railway's talus, and a single exposed façade, the northern one facing Leblanc street (the south façade towards the railway allows only secondary openings).

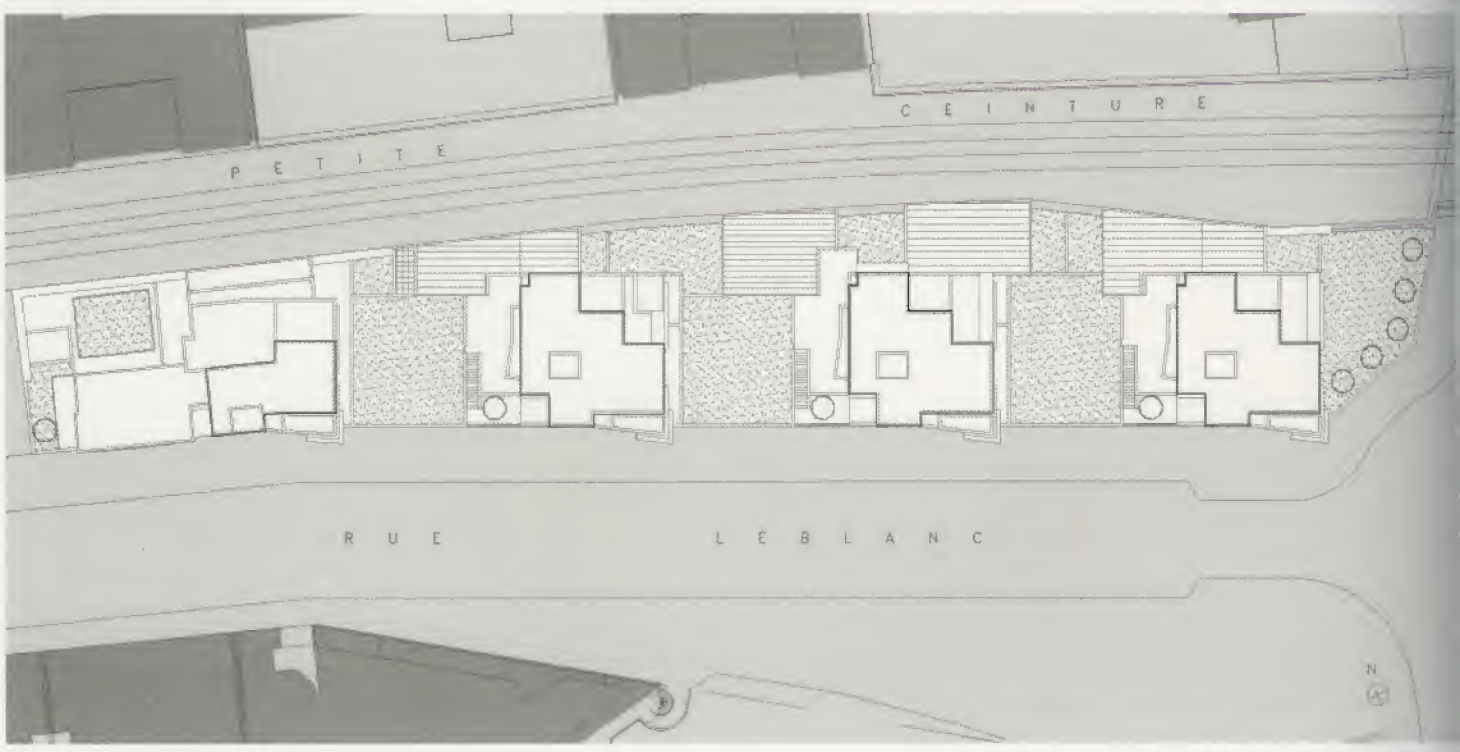
The parking space was situated on the ground floor to reduce the presence of the railway's talus and diminish building costs since the water table is not very deep. The dwellings are then built above a continuous plinth constituted by the garage. The building has been divided into four different volumes with ten dwellings each to allow southern light to flow into the apartments and provide them with east-west orientation.

Private terraces or elevated gardens have been set in the interstitial space between volumes. These become "belvederes" oriented towards André Citroën Park, in front of the site.

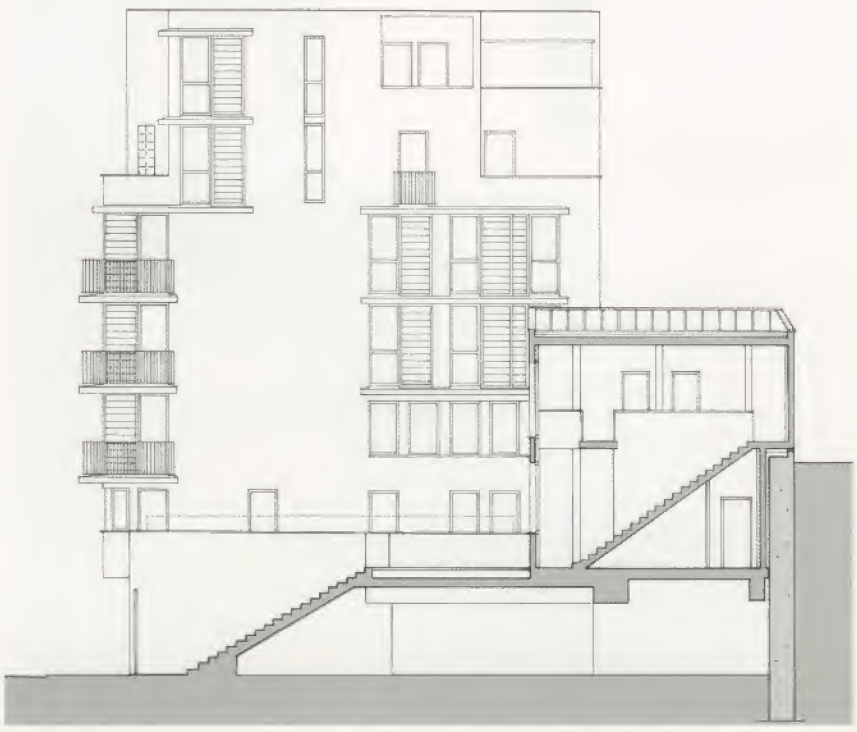
Behind the housing volumes there are four individual houses arranged in the elevated patios with a direct access to the street through exterior stairways. Situated along the railway these houses fulfil two goals: to counteract the railway's retaining wall's pressure through partition walls, and to take advantage of the 3 or 4 meter deep "lost space" by proposing unusual housing types with private gardens. The lot's shape and the varying height of the railroad platform where the houses stand provide limited space which is counteracted by the volume's verticality and through the creation of transversal views.

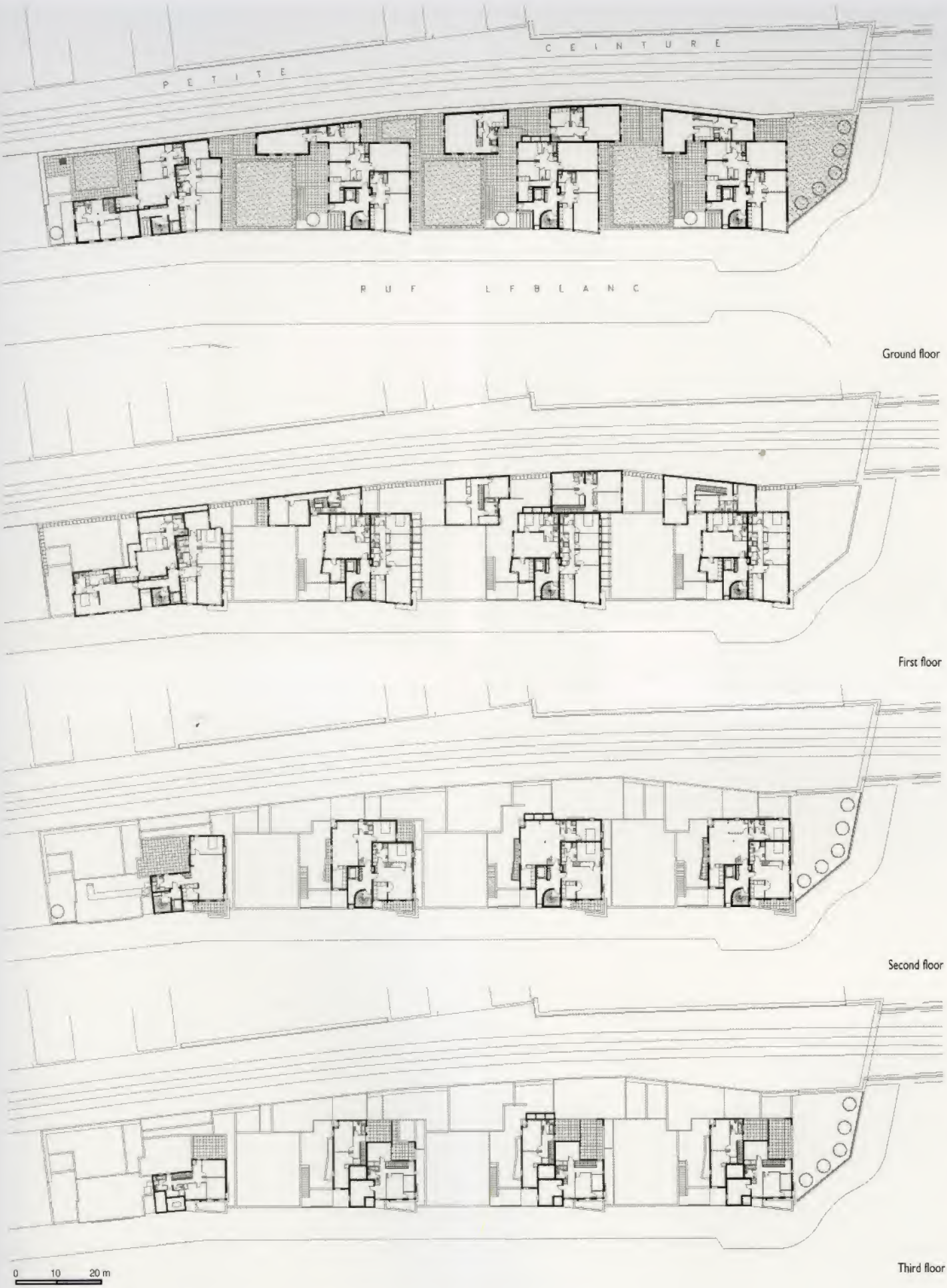
Landscaped entrances perforate the garage plinth to avoid the shut image of it along the whole street. The double-height glazed entrance halls are situated above these grooves providing the façade with a certain rhythm.

The project is composed of four housing blocks united on the ground floor by a continuous plinth that holds the parking space. The building is situated against a retaining wall that separates it from the railroad tracks.



Private terraces or elevated gardens oriented towards André Citroën Park have been set in the free space between volumes. The arrangement of the volumes increases natural light and allows the apartments to have an east-west orientation.





All dwellings have multiple orientations; the kitchen is always on the façade, and when possible the bathroom is also. Some of the big apartments have two levels, arranged to allow different oblique views between the lower level and the terraces situated in the bedroom level. This provides them with three orientations and a spacious sensation.

The landings receive natural light contributing to the spatiality and quality of these transitional spaces.

Wiel Arets Architect & Associates

Hoge Heren

Rotterdam, Holland

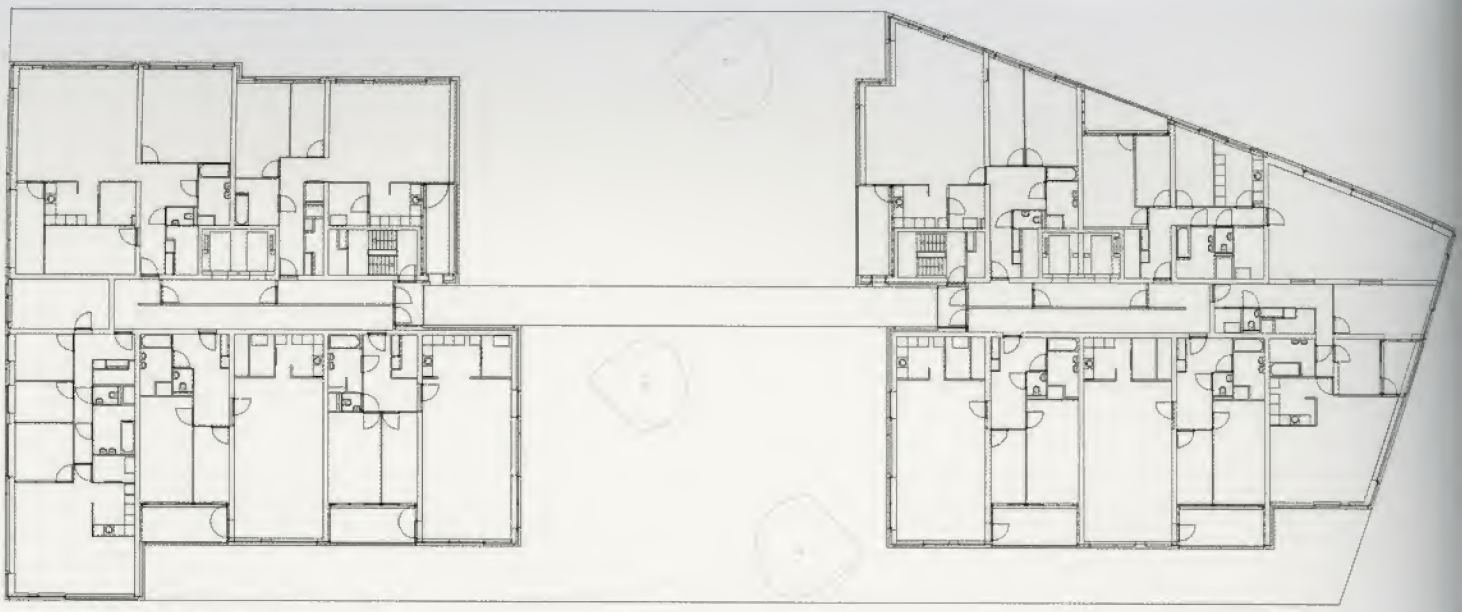
Photographs: Jan Bitter

The project for these two housing blocks has been derived from an operation in the center of Rotterdam, a harbor city with an important social housing tradition. The two towers are placed in a former shopping area.

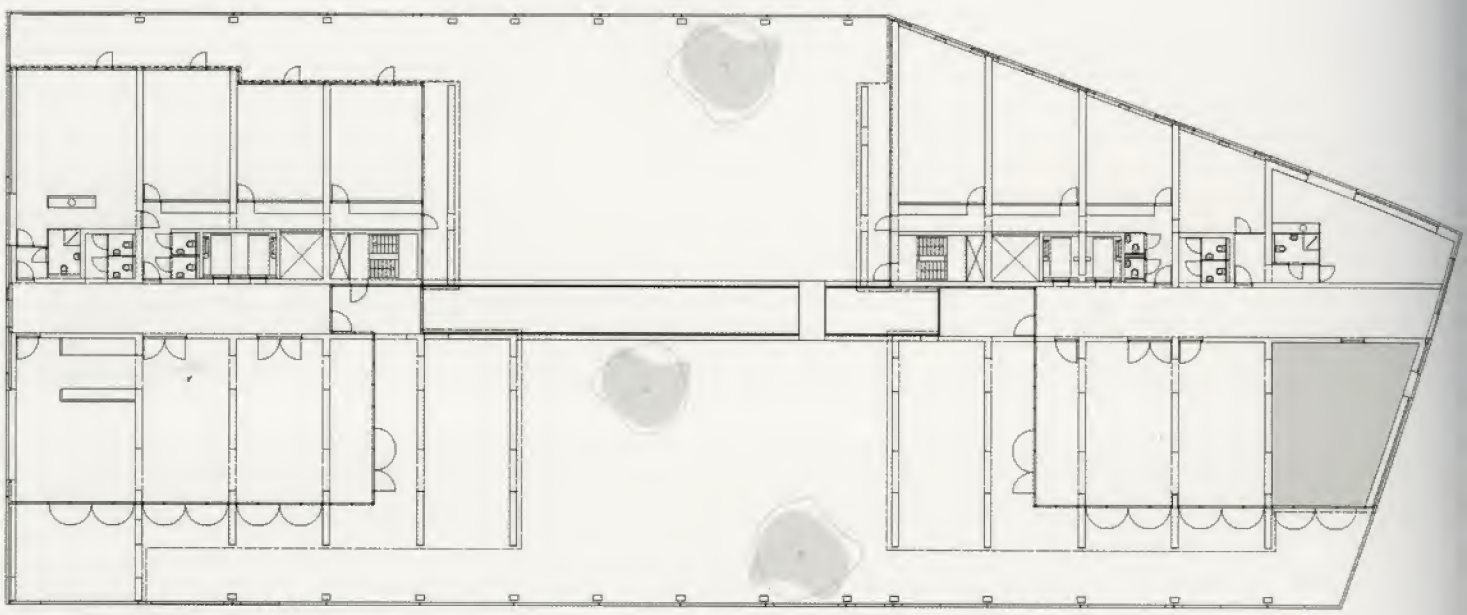
The new bridge works not only as a connection between both sides of the Maas river, but also as an element that separates both towers introducing a vertical void between them.

A glass wedge that introduces a new perspective where the towers appear to float, defying gravity, cancels the volume's solidity. Residual spaces are well organized to lodge the parking, hall, a big cafeteria and technical service rooms.

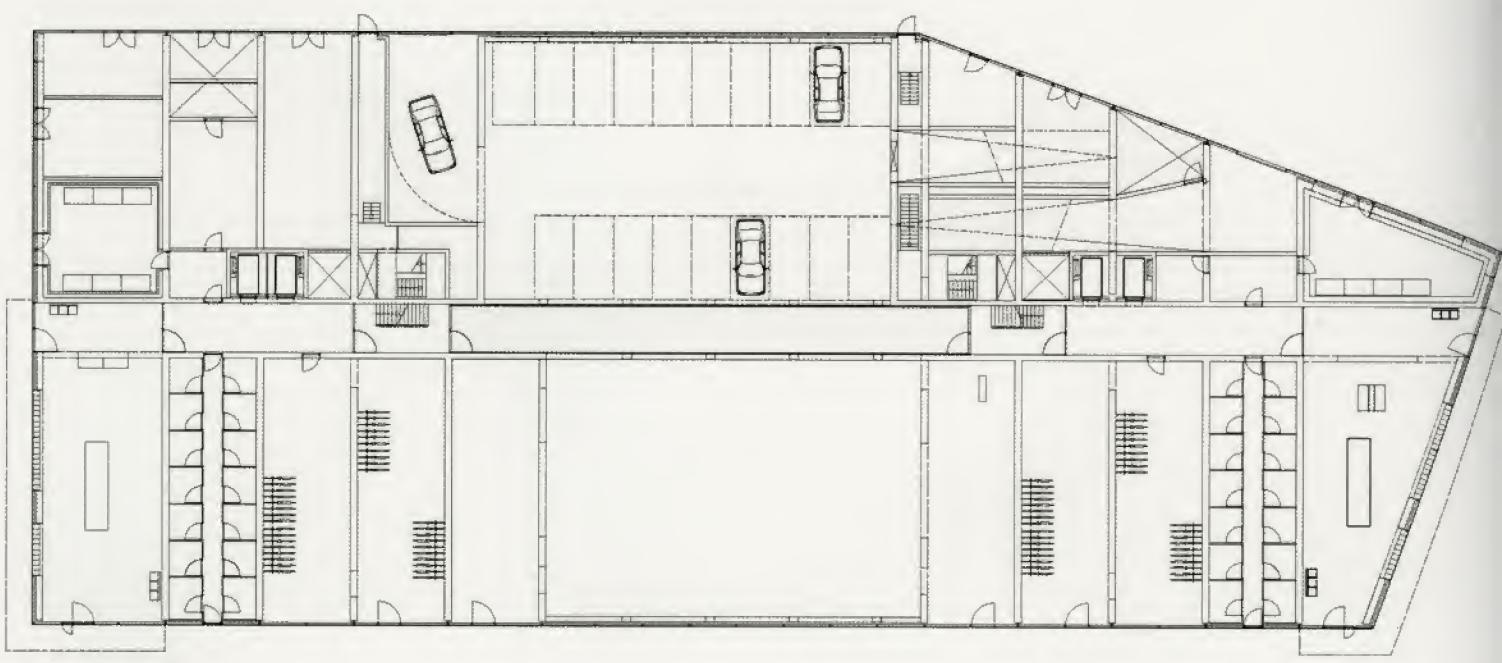
The black concrete volume rises above the glass wedge. This volume hosts the parking, storage rooms and a pool with exterior garden and sauna on the fifth floor. The two towers rise from this volume 29 levels with 290 dwellings.



Standard floor plan with 5 dwellings per floor



Fifth floor. Contains exterior garden, swimming pool, and sauna



Ground floor, entrance.

Elisa Valero Ramos

Selfbuilt Housing in Palenciana

Cordoba, Spain

Photographs: Fernando Alda

Architecture belongs to its location, which conditions it and makes it unique. The urban network, the topography, which gives it a balcony condition, the insertion in the landscape, as well as the luminosity, and the use of certain materials, are all conditions behind an idea materialized in a set of white houses in a white village, continuing with the vernacular tradition of Andalusia.

The complex is composed of 13 houses with a very limited surface, the resolution of which had to suit the local design regulations. They are situated in the southern area of Palenciana, on both sides of a recently created street. The lot was divided into two rectangles, six houses with a 7x14.5 meter plot are placed in the first one and seven, with the same dimensions, in the second one.

In these houses there is a play in scale to achieve a sense of decompression. The circulation thus obtains great importance. The house is accessed through a porch enclosed on three of its sides and with its ceiling right above the door's lintel. After it we perceive the stairway's space, a generous, airy volume lit by a ceiling lamp that generates a transcendental and ample sensation.

Precision implies in the whole the resolution of problems by reducing them:

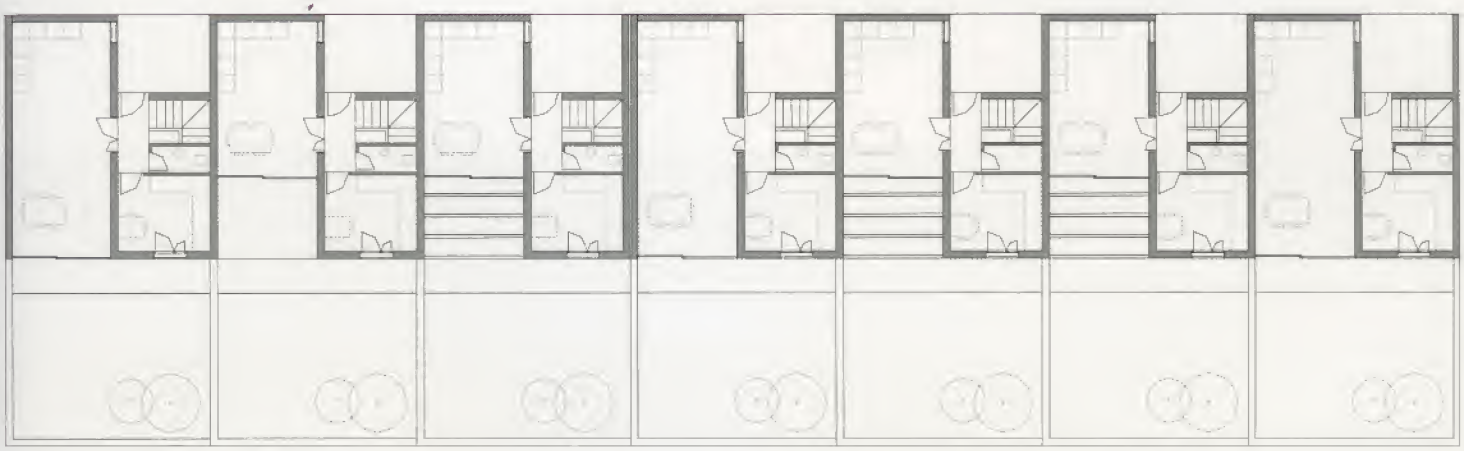
Precision in the selection of adequate materials to prevent future problems, taking into accounts the effect of nature and the ageing of the construction materials. Precision in the use of light, since the excess of it can be counterproductive in the southern regions. The fragmentation of the volumes has also been contemplated with regards to its adequacy in its urban frame. Elisa Valero has chosen a contemporary language, adapted to the techniques and aesthetics of present times, becoming part of history from a present perspective and refusing folkloric mimesis with inherited architectures. Design's rationality, efficiency, economy and common sense have been the tools that enabled a simplified construction, overcoming budget restrictions and guaranteeing a correct ageing of the building.

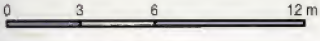
The whole is organized into two plots, occupied by six and seven single family housing units respectively. Budget restrictions resulted in rational design, which escapes inherited traditionalist imitations.

Patio façade

Street façade

The ground floor is composed by a double bay of bearing walls perpendicular to the façade: The double-oriented living room is located in one of them and the other one hosts the stair and the kitchen. Three rooms and a bathroom have been arranged on the upper floor with the possibility of enlarging it with a fourth room that would generate a porch between the living room and the courtyard.





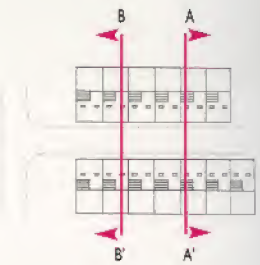
The flat roof has been planned as transitable, forecasting its future use due to a possible enlargement.

Section A-A'

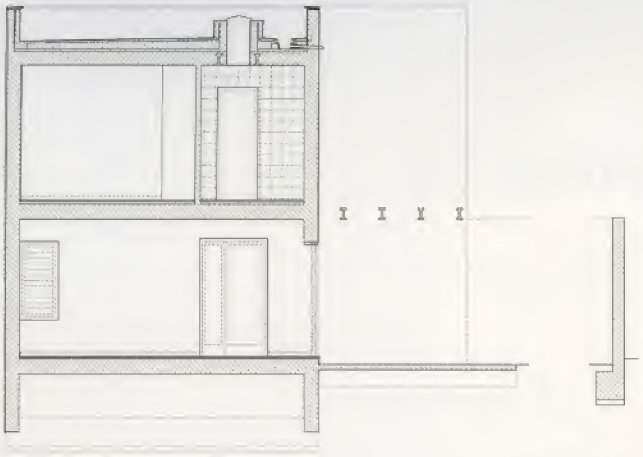
Section B-B'

0 3 6 12 m

The living rooms, oriented to the south, are protected and open towards the courtyard -rear patio- achieving optimum illumination and ventilation. Living rooms can be extended by 10 square meters simply by moving the glazing until the building's limit and paving the floor.

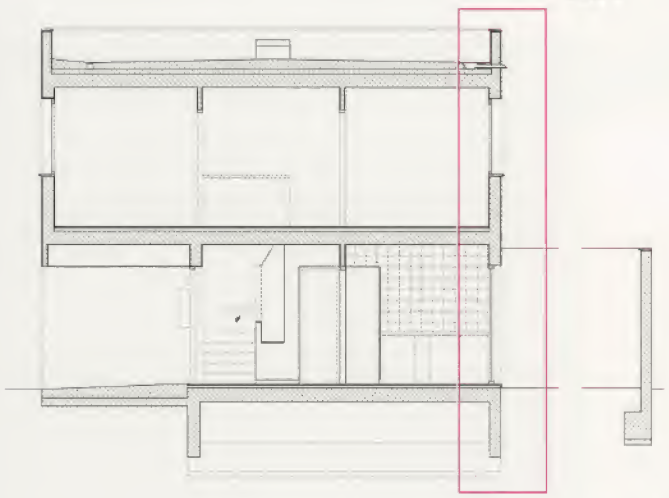


The light, protagonist of the southern lands, penetrates the interior of the dwelling through diverse ways.



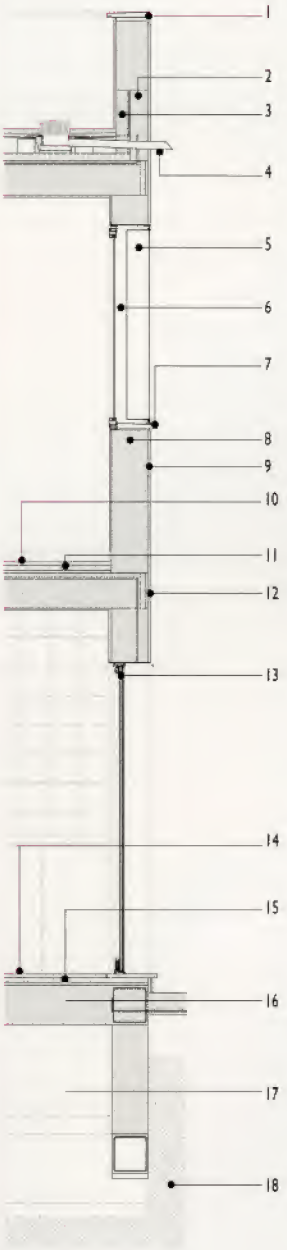
Section A-A'

Detail C



Section B-B'

The construction system has been conceived through a very simple structure, with average and uniform roof distances between the lightweight ceramic block bearing walls parallel to the façades.



1. Limestone finish, e=2cm
2. Air brick zither
3. Double air brick partition wall, e=8cm
4. Aluminum gargoyle
5. White enamelled galvanized steel shutter
6. White enamelled aluminum joinery
7. Limestone window-sill
8. Lightweight ceramic block wall
9. White single layer finishing mortar, e=12mm
10. White cement fine-grain terrazzo 40x40cm
11. Bonding mortar
12. Simple air brick e=4cm + glass fiber insulation e=2cm
13. White enamelled aluminum joinery
14. White cement fine-grain terrazzo
15. M-40 cement mortar over sand layer
16. Precast girder roof structure, e=24 cm
17. Accessible and ventilated antihumidity air cavity
18. Natural soil

Section detail C

HPP Hentrich-Petschnigg & Partner KG

Housing for Young People in Leipzig-Connewitz

Photographs: PUNCTUM / H. -Ch. Schink

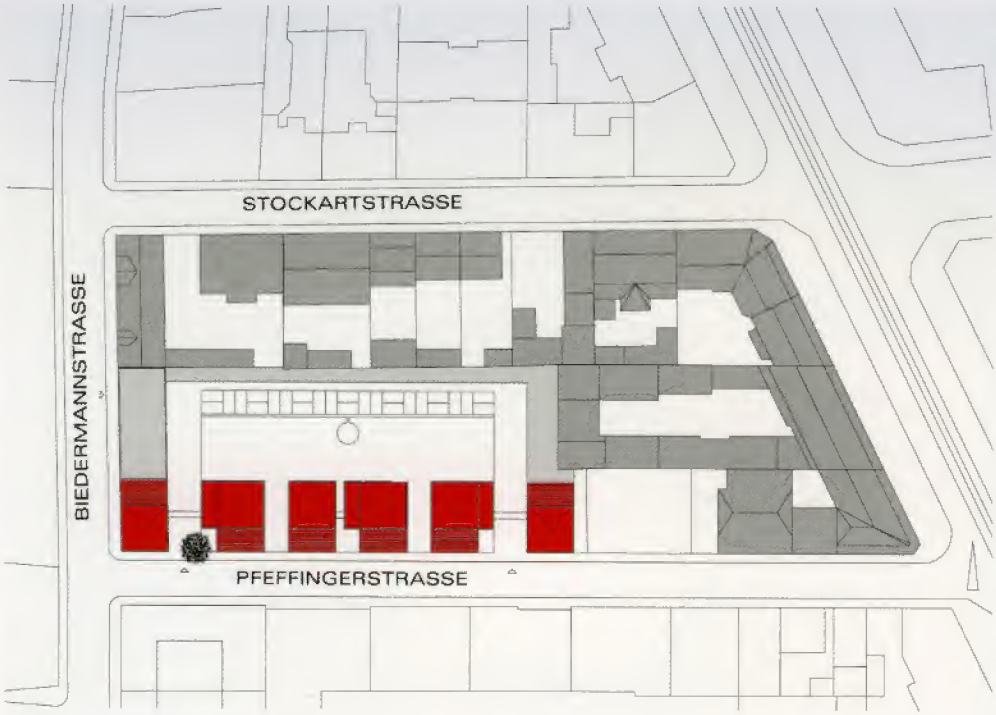
Leipzig, Germany

The project is located in the district of Conewitz, Leipzig, and aims at creating a new residential area that adapts to the existing urban context and at the same time provides its surroundings with a contemporary essence. The arrangement of the blocks forms a semi-enclosed patio that sets interesting visual links with the surrounding streets. This conception, related to the city's traditional scheme, creates a strong relationship between the private interior garden, used mainly by the younger inhabitants, and the public character of the streets around it.

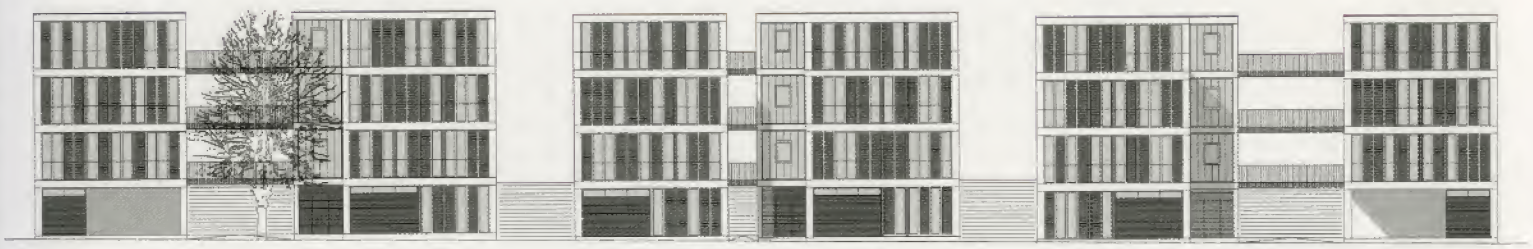
Although the dwellings repeat a similar scheme, the volumes' independence supplies the dwellings with privacy and different orientations. Stairways and footbridges unite the different buildings while encouraging social interaction. The roof is set back from the street to create large terraces atop each building.

This housing complex is aimed mainly at young families. The floor plan has a flexible scheme to allow different lifestyles and family organizations and they all have a north-south orientation. There are also smaller housing units with terraces and houses with an east-west orientation on Biedermannstrasse.

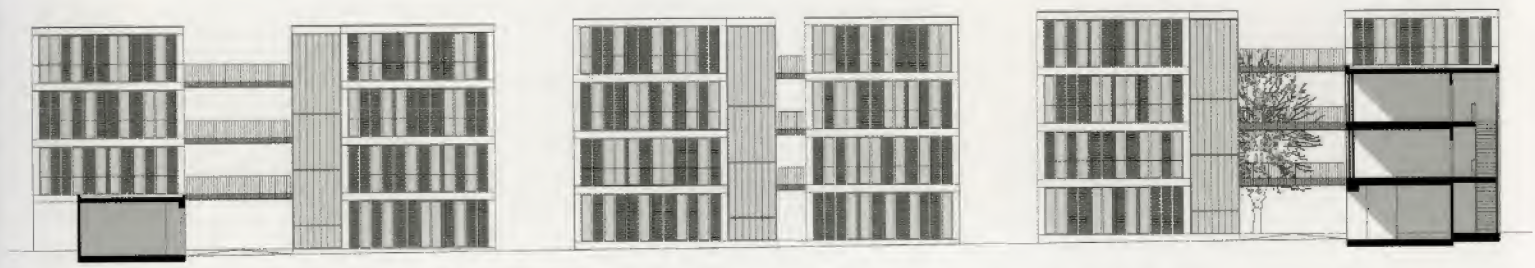
The 26 dwellings all share a similar standard, being the ones on the ground floor free of architectural barriers. Part of the interior patio can be used for private gardens that can be integrated into the community project. Each dwelling has a storage room for bicycles and other objects. The toilets and the garden's irrigation use rain water.



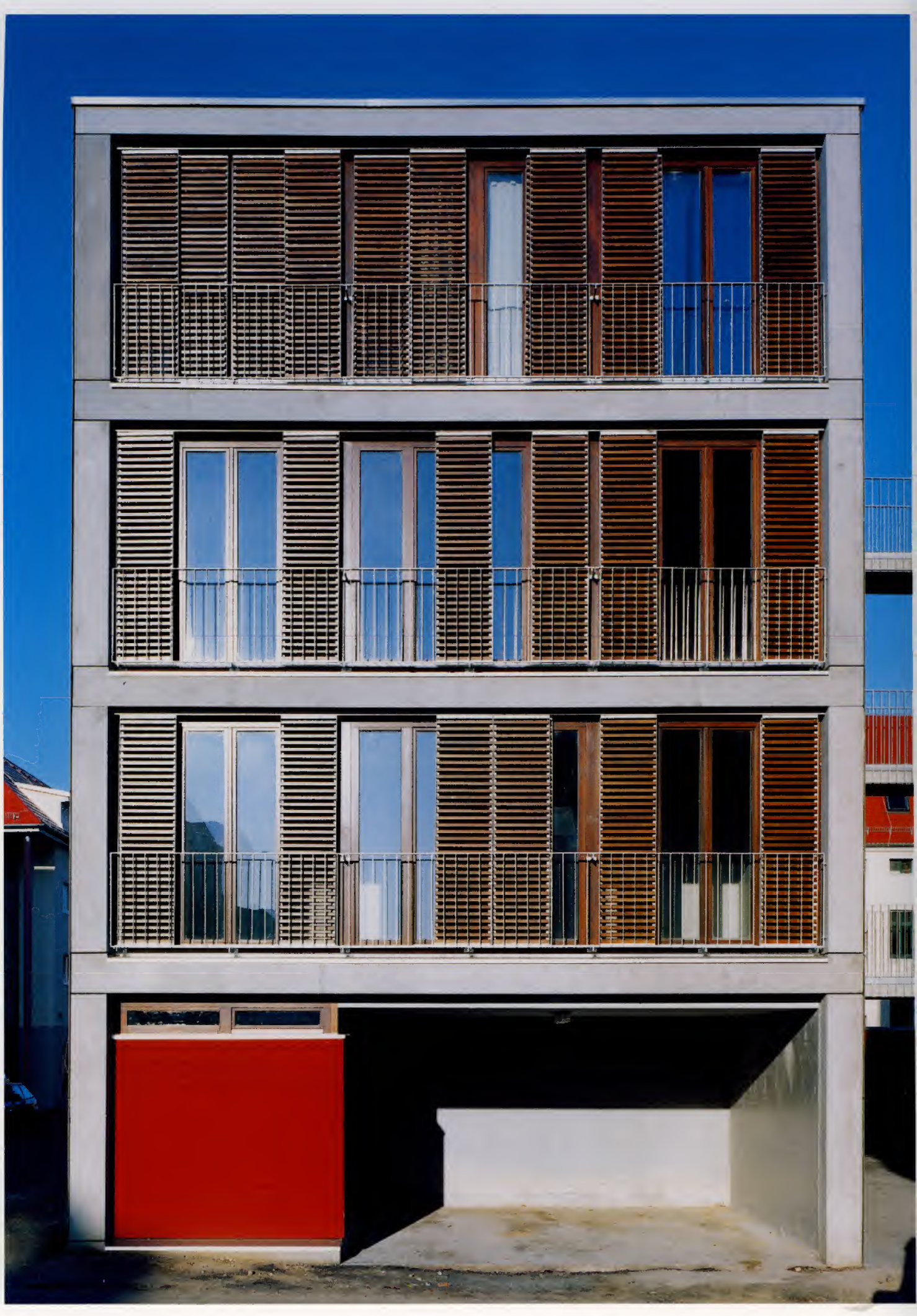
The project is composed of six volumes that share a back patio accessed from the street through certain points.
The building combines a clear architectural expression with a rational use of materials. This expresses an innovative character in accordance with the age of future inhabitants.



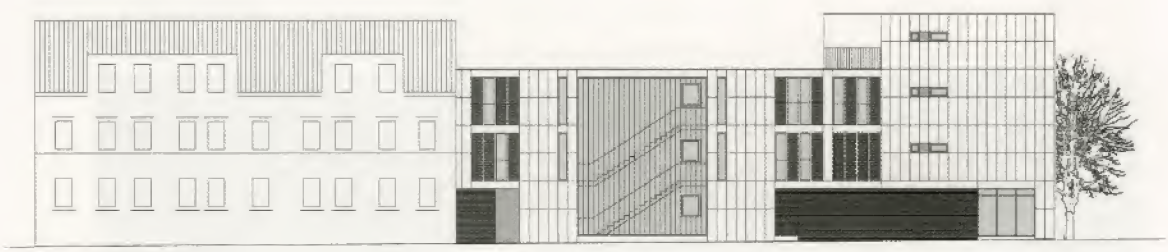
Pfeffingerstrasse elevation



Interior courtyard elevation



The translucent glazing, the fiber-cement panels and the prefabricated concrete elements have been chosen following a decision to use manufactured industrial materials.

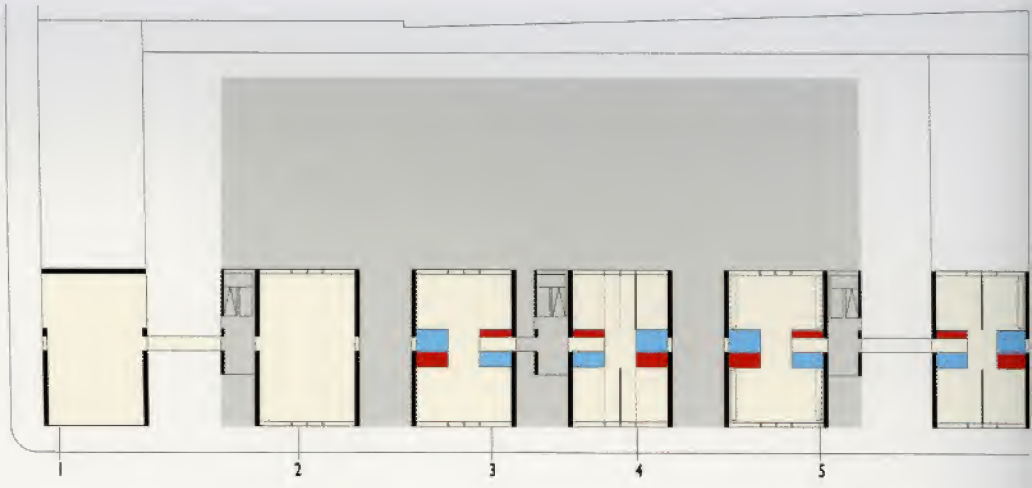


Biedermannstrasse elevation

Interior courtyard cross-section.

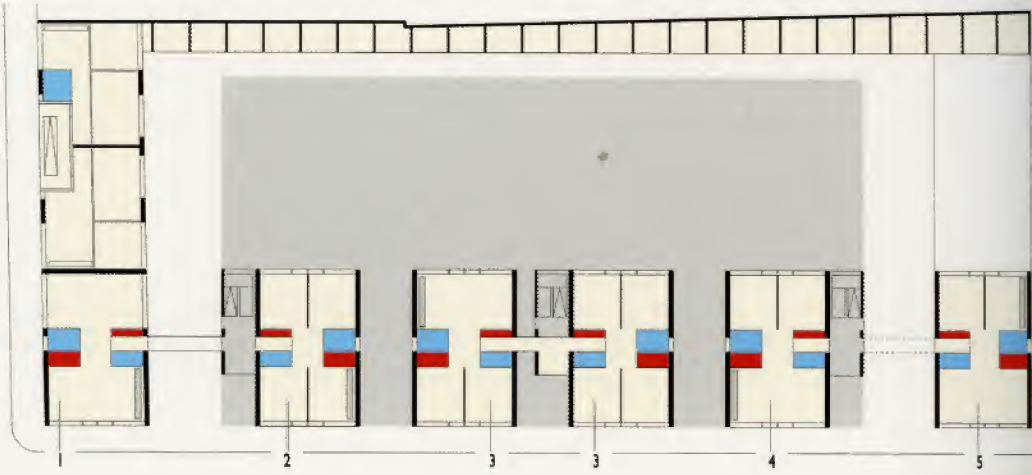
Description:

1. Plain construction:
   Reinforced concrete
2. Façade
   Wooden panels / glass / fiber-cement
   Windows / Sliding elements
   Wall lining
3. Interior
   Plaster boards
   Industrially manufactured stone
4. Partition walls
   Sheetrock
   Individual space partition, modular
5. Kitchens
   Individual dimensions and arrangements



Housing types:

1. Open plan dwelling
2. Three rooms and kitchen
3. Big apartment for sharing
4. Two rooms and kitchen dining room
5. Barrier free dwelling

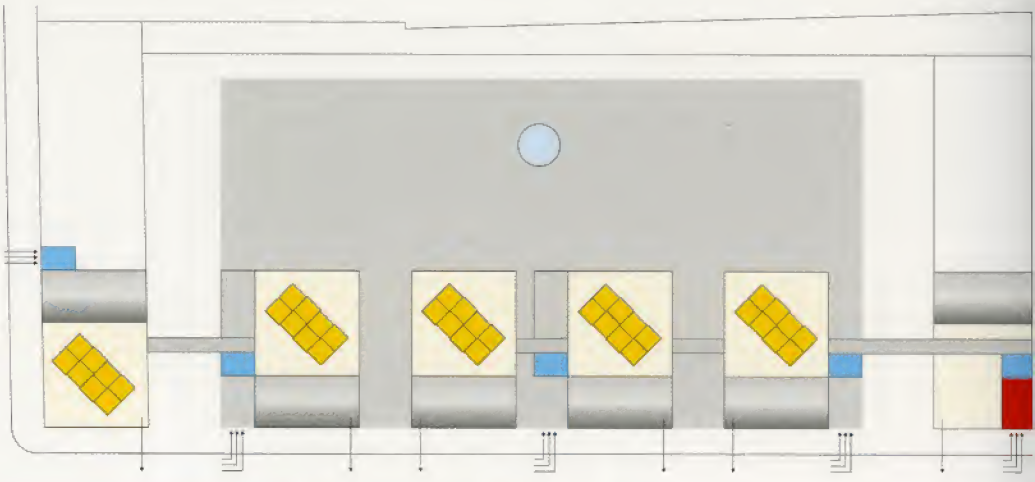


SERVICES ROOM
Central heating
- Drinking water connection
- Electrical engineering
- Solar water heater
- Heater regulating equipment
- Sewage plant

Heat transmitting plant

Solar panels

Tanks



The concrete gangways reflect both the volumes' individua
and the unity of the whole.

Ground floor

First floor

The apartments have a neutral scheme with a north-south orientation; the partition walls and the kitchens can be adjusted to the needs of each inhabitant.

Both the living room windows and the wooden-slat sliding blinds fit the interior's ceiling height.

Floor composition:

- Lining + adhesive
- Concrete floor, 45 mm
- Heater conduction
- Singelboard (lambda = 35)
- Extra insulating board

1. Galvanized handrail
2. Galvanized rail, T 35
3. Galvanized drip
4. Galvanized L profile 45x30x3 mm
5. Wooden slats 30x40 mm
6. Pinewood: Base: walnut wood
   Lining: Oak wood
7. Frame